

A COMPLETE
HISTORY
OF
DRUGS.

Written in FRENCH

By Monsieur P O M E T
Chief DRUGGIST to the late French King LEWIS XIV.

To which is added what is farther observable on the same Subject, from
Monsieur L E M I R Y and T O U R N E F O R T,

Divided into Three CLASSES,
VEGETABLE, ANIMAL, and MINERAL;

With their Use in
PHYSIC, CHEMISTRY, PHARMACY,
And several other ARTS.

Illustrated with above Four Hundred COPPER-CUTS, curiously done from the
Life, and an Explanation of their different NAMES, PLACES OF GROWTH,
and COUNTRIES where they are produced; with the Methods of distinguishing
the Genuine and Perfect, from the Adulterated, Sophisticated, and Decayed;
together with their VIRTUES, &c.

A Work of very great Use and Curiosity.

Done into *English* from the ORIGINALS.

The FOURTH EDITION, carefully corrected, with large ADDITIONS.

L O N D O N,
Printed for J. and J. Bogue, S. Bay, W. Parker, C. Hitch, and E. Wickstead.
MDCCLXIII.

The DEDICATION of the former Editions
To Sir *HANS SLOANE*.

S I R,

I THINK myself under many Obligations of offering this Undertaking to you, which I should be much wanting to myself, if I did not acknowledge. The first is, That you have been a very generous Encourager of this Design, not only by recommending the Work, but in assisting the Performance; which is a Favour I beg Leave to thank you for, as well as the kind Present you made me of your *Natural History of Jamaica*. And though these were Inducements, they were not the real Motives that made me think this Work could come to none so properly as yourself; but it was the Consideration, that you are, without the least Tincture of Flattery, the only Person of the Faculty in these Kingdoms, who of late Years hath made the *Materia Medica* your Study: So that it is hard to say, whether your Discoveries in the Theory of Medicine, or your judicious Improvements of those Discoveries in the Practice, have exceeded.

It would look vain in me to attempt the Characters of my Authors, to one who is so much better acquainted with them, and whose single Recommendation would be sufficient to make the Publick value their Productions: But I flatter myself you will forgive me if I briefly inform you of the Method used in compiling and translating this Work, wherein I hope you will be of Opinion I have done my Authors no Injustice. For, in the first

Place, I have taken Monsieur POMET for my Text, making use of the Liberty of throwing out Repetitions, or whatever else was foreign to the Purpose, or better described by others, especially Messieurs TOURNEFORT and LEMERY, whom you know well to be more accurate and concise. And in the next Place, I have added several Things to Monsieur POMET, wherein he was erroneous in Description, Dose, or Choice of Drugs, which were much better known in these Countries, and more in Use amongst us. And, indeed, I have pursued the same Rule with Monsieur LEMERY, but with more Caution; so that it made this a Work of more Time than I expected when I first engaged in it. And yet perhaps I have not come up to the Taste of some curious Gentlemen, who are more accurate in Botany than I can pretend to; therefore I throw myself entirely upon your Favour, because I am assured you have too much Candour for Industry, and Concern for useful Knowledge, not to pardon small Faults, for the Sake of many Things that may be commendable and instructive, and that otherwise would not be so readily ushered into the World.

And though it is certain, that the Knowledge and Choice of Drugs is one of the most useful and important Parts of Physick, yet it has been the most neglected of any to this Day; and it is not easily apprehended how much the Publick suffers in the Sale which is daily made of I know not what sophisticated and decayed Drugs, which are not capable of producing the Effects that are designed by them, and expected from them, either to restore or preserve the Health of Mankind. We may yet be more surprized at the fatal Mischief that flows from Mens Ignorance in the common Choice of Drugs; and that nothing is more frequent in Druggists and Apothecaries Shops than adulterated Medicines, which deserve not least the Title of those pompous Names, by which they enhance the Prices of them.

Hence

DEDICATION:

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Hence, *Sir*, you may plainly see our Author's Designs were to expose the ill Practices of those Men who did so much Prejudice to the Profession of Physick, by rendering the Practice precarious, and setting a greater Value on a decayed Drug, or Composition of the Shops, than on the Life or Health of one of their Fellow-Creatures: Therefore, as one can scarce discover their Works of Darkneſs without suffering by the Malignity of their Tongues, who ſo undeſervedly make a Gain of People's Credulity, I ſtand in need not only of an Advocate but a Protector: And ſince every one knows that you are univerſally ſkilled in all the moſt curious and uſeful Secrets of Nature, either in the Vegetable, Animal, or Mineral Kingdoms, whatever is here treated of in the following Books, your Travels into thoſe Countries Abroad, where many of them are produced, and your Diligence in furniſhing your *Muſeum* at Home, from all Parts of the World, have made you intimately familiar with; ſo that no Perſon but will allow your Approbation a ſufficient Sanction to this Work, and Protection to the Compiler thereof, who is, with the utmoſt Eſteem,

S I R,

Your very Humble

Servant to command, &c.

P R E F A C E

T O T H E F O R M E R E D I T I O N S.

THE Knowledge of simple Drugs is a Study so agreeable, and so exalted in its own Nature, that it has been the Pursuit of the finest Genius's in all Ages. Several Princes have applied themselves to it with a great deal of Satisfaction to their own Minds, and Improvement to the Publick, and to these we are obliged for the first Essays of Medicine. It is also an indispensable Knowledge to all who are concerned in Composition, especially Apothecaries; for which Reason they ought to begin with this Study, before they undertake *Pharmacy*, else they can never prepare any thing with Exactness, which is the occasion of so many gross Errors that attend the Business, to the great Prejudice of the Patient: They ought to know, as well as the Druggist, from whence every Drug comes, because different Climates encrease or lessen much their Virtues; they ought to distinguish them by their Names, their Figures, their Substance, their Touch or Feeling, their Weight or Lightness, their Colour, their Smell, their Taste; and to take particular Care that those which come from foreign Countries be not counterfeited or adulterated: For the Merchants, through whose Hands they pass, are sometimes too covetous of extravagant Gain, so that they sophisticate and counterfeit so well, that it is a hard matter to discover the Cheat, if we have not been very conversant, or well acquainted with those Drugs before. Druggists themselves are sometimes deceived in buying great Quantities of false Drugs for good ones, and they then sell them so again; for which Reason it is very necessary that the Apothecary should be well skilled in the Knowledge of the True from the False, which is gained by a continual Trade in them, and a Frequency of seeing them. A Druggist ought to apply himself as much as possible to get Drugs at the first hand, and to know the Places of their Growth, and their true Natural History: But, most Books that have been written hitherto, have told us nothing but Fables on this head.

The Publick will find themselves much indebted to Monsieur *Pomet*, for the great Number of curious and useful Remarks they will meet with in this *General History of Drugs*; which is farther enriched by the Discoveries of a great many Things that were before in the Dark, but since brought to Light, by the Labour and Industry of him, and the more accurate *Lemery*: But Interest, we see, prevails upon Curiosity, since we meet with very few Merchants that will employ any

Part

Part of their Time to instruct themselves in these Affairs, which they are not persuaded are any ways necessary to their Business.

Besides, this Work is not only useful to those who profess Physick, and who will put nothing in the Composition of Medicines that they prescribe, except choice Drugs, but likewise it is serviceable to Students in Pharmacy, to Druggists and Apothecaries, who may improve themselves by what they will find in this Work, from whence they may learn to make a right Judgment of what is true or false in the Use or Trade of Drugs; since People that compose Medicines ought to know, that what they buy will answer the Ends they propose: Besides, there are several Artists and Tradesmen who make use of Drugs, to whom it is necessary, and of great Importance to the Publick, that they should not be cheated or imposed on, as Surgeons, Goldsmiths, Painters, Dyers, Farriers, &c.

I am persuaded, that those who read this Work will be satisfied, that they never saw one Treatise of Drugs so complete; for here is not only collected what may be found scattered in a great many Authors, but a great many Things that were unknown before *Pomet's General History of Drugs*, or at least very few of them were ever taken notice of by any former Author; for he acknowledges to have abundance of Materials given him by *Monf. Tournefort*, and several others of his Friends, who made it their Business to assist him with all the new Discoveries they could meet with. And though this Work is not swelled into many Volumes, of much larger Size than the two present, yet they contain twice as much as is in *Pomet*, besides the Additions that are necessary to the Text from *Lemery*; and this considered, together with the Number of Figures, and the neat Performance of them, which are nothing inferior to the Originals, renders this one of the cheapest Books that has appeared of latter Years; which has been contrived for the Good of the Publick, many of the Figures being brought into one Plate, on purpose to prevent the Book from swelling to too large, and too exorbitant a Price, and so destroying the Usefulness of the Design, and the Sale of the Book together.

All the Drugs herein mentioned, have either their proper *Latin* Names, or the Names given them by the Country from whence they are brought, with their Etymology; where most pertinent, their Description and History taken also from *Mr. Lemery's Universal Treatise of Simple Drugs*; the judicious Author whereof has endeavoured to inform himself both from ancient and modern Authors, and the Relations of several Travellers, of whatever could be known concerning the Substances and Principles of which each Drug is composed, and its Quality, and as succinctly as possible, to give an Idea of the Thing treated of, that might be satisfactory. Now all Drugs are taken from Animals, Vegetables, and Minerals, their Parts, and what proceeds from thence; as their Hair, Nails, Horns, Milk, Blood, and Excrements. Under Vegetables are comprehended Trees, Shrubs, and other Plants, with what comes from thence; as Roots, Barks, Flowers, Fruits, Seeds, Mushrooms, Mosses, Gums, Rosins, Pitches, Turpentine, and Balsams.

Under

Under Minerals are understood Minerals, Metals, Marcasites, Stones, Earths, and Bitumens.

All Animals, according to the most probable and most received Opinions, come from Eggs, and are there enclosed, as it were in Abridgment, till the Seed of the Male penetrate their Covering, and stretches them sufficiently that they are ready for hatching: There enter into their Vessels a chylous Juice, which being pushed forwards by the Spirits, circulates through the whole Habit of the little Body, nourishes and dilates it by little and little, which makes what we call Growth. This Circulation, repeated several times, makes the nutritious Juices so refined and attenuated, that they take a red Colour, and are converted into what we call Blood. This natural Operation has a great Resemblance to several chymical ones, by which, in attenuating and dissolving the sulphureous or oily Substances, we can make a red Colour, which, notwithstanding, has a great deal of Difference: For example, if we boil in a Matrafs one Part of Chyle or Milk, with two Parts of Oil of Tartar, *per Deliquium*, the white Liquor will become red, because the Salt of Tartar being rarified, dissolves and exalts the unctuous Part of the Milk, and reduces it into a kind of Blood. If we boil together in Water one Part of common Sulphur, and three Parts of Salt of Tartar, the white or yellowish Liquor that was before acquires a red Colour, according to the Quantity of the Sulphur dissolved. If we digest upon the Fire Flower of Sulphur in Spirit of Turpentine, the Liquor gains a red Colour.

The Circulations that are made perpetually in Animals, exalt so much their Substances, and render them so disposed for Motion, that the Principles which arise from thence are almost wholly volatile. But indeed these Principles are not equally volatile in all Animals: For example, Fish afford less volatile Salts than terrestrial Animals: The *Scorpion*, the *Crab*, and the *Eel*, yield less than the *Viper*; *Earth-worms* and *Snails* afford less than *Serpents*; *Ivory* less than *Hart's-horn*; and so of the rest.

The different Degrees of Volatility that are in Animal Substances, give them different Virtues one from the other; so those which have very volatile Salts, are usually reckoned cephalick and diaphoretick; as the *Viper*, *Human Scull*, *Hart's-horn*, *Goat's-blood*, *Elk's-claw*; because the Matter being heated in the *Viscera*, pushes forth their Salts into the Brain, and by the Pores of the Body. Those whose Substances are less volatile have an aperitive Virtue, such as is to be met withal in *Hog-lice* and *Crawfish*; because the Salts of these Animals being heavier, are more inclinable to precipitate and open the urinary Passages.

Every Plant arises from its Seed, and is confined in miniature as in an Egg, after the same manner as Animals, the Earth becomes a Matrix to the Seed, it softens it and extends the Bark, opens the Pores, and by a nitrous Fluid it is penetrated and unsheathed from the Husk, so that the Parts of the little Plant are stretched,

stretched, that were before wound or locked up together confusedly, and then this small Plant begins to appear upon the Surface of the Earth, and the nutritious Juice or Sap circulates in the Fibres that do the Office of the Veins, Arteries, and Nerves; they dilate, extend, and grow to a certain determinate Size, limited and appointed by the great Author of Nature.

A Plant draws its principal Nutrition by the Root, because the Pores thereof are better disposed than others, for receiving in the Juice from the Earth. This Juice, in circulating in the Vessels of the Plant, purifies itself, is rarified, exalted, and brought to perfection after the same manner as the Chyle and the Blood acquire their Perfection by Circulation. Then the more exalted and spirituous Parts of the Juice, which may be called the animal Spirits of the Plant, are employed upon the Flowers and Fruits; the less subtle Parts supply Nourishment for the Stalk, the Branches, and the Leaves; the grosser Parts still congeal or coagulate into Gums, Rosins, and Balsams: Those that are the grossest of all, produce an external Bark. Though all the Plants of the Earth receive their Nutrition from one and the same Spring, they, notwithstanding, every one of them, acquire different Qualities, occasioned from the Diversity of Fermentations and other natural Elaborations, that are produced by the Texture or Disposition of their different Fibres. We may distinguish Rosins from Gums, in that Rosins are much fatter, and that they dissolve, consequently, much easier in Oil.

The Origin of Minerals is different from those of Vegetables and Animals; this proceeds from the Congelation of acid or saline Waters charged with such Matters as will dissolve in the Earth. Metals are produced from a greater degree of Concoction, a longer Digestion, and closer Union than the Minerals, which are separated or divided from the grosser Parts in the Ores, after the same manner as Gold and Silver separate themselves from their Metals in the Cupel. All Ores are not in a State or Condition of producing Metals, for it is necessary there should be a Disposition and natural Heat capable of raising extraordinary Fermentations and Elaborations, and high Mountains are usually the properest Places for these Productions, because the Heat therein contained is more regular and exact than elsewhere.

It is not Chance only that conducts us to the Discovery of metallick Mines, but those who apply themselves that Way, observe or take notice of several Circumstances which direct them to the Places where they may be found: For example, When on a Mountain, or in the Cliffs and Breaches of Rocks, they meet with Marchasites, and small heavy Stones of a Mineral Kind, or that they perceive on the Surface of the Earth several Mineral Veins; these are Signs that there is something to be found, that is likely to answer their Expectations, and that they may be assured of Success.

When in certain Streams or Rivulets there is seen a fort of Sand of little Picces of Marchasite of some Mineral, there is a Sign that there is some metallick Mine near the Place; for these metallick Bits are washed off, and conveyed by the Current of the Water that flows usually from the Bottom of some Hill; so that it runs back again towards the Fountain-head, insomuch that if you pursue these small Picces of Marchasite, they will bring you to the Place where the Mine is.

When the Aspect or Figure of a Mountain is rough and wild, the Earth is barren, naked, and without any kind of Plants, or that only some particular Kinds are produced, which are almost withered and dry; these are Signs that there are Mines in this Mountain, because the great Barrenness of the Surface was occasioned by nothing else but the mineral Vapours, which consume the Roots of the Plants; though it does not always happen that mineral Places are barren, there being very many that are covered with great Variety of Herbs. When we see a very clear Water flow from a Mountain that has a mineral Taste, it is a Sign that the Place abounds with some kind of Metal or Mineral; for those sort of Places are usually supplied with a great deal of Water, which give great Disturbance to the Workmen, it being necessary to drain off the Water before you can search for the Metal.

When we are very certain, by several Signs or Observations, that any Hill or Mountain contains in it some Mine of Metal, we begin to sink or dig a Pit at the lower Part or Foot of the Hill, in order (as the Miners call it) to carry the Level, whereby the Waters may run off of their own accord, and without the Assistance of Engines; and thereby they may be able to come at the Deep, where the largest and richest Part of the Metal lies. We must take notice, that the metallick Matter being as yet stony in the Mine, divides itself into several Veins or Channels, that represent the several Branches of Trees, or the Arms of a River. Metals differ from other Minerals in being more malleable, whereof there are seven; to wit, Gold, Silver, Iron, Tin, Copper, Lead, and Quicksilver; the last is not malleable, but will amalgamate with any of the others, and therefore is by some called a half Metal, though others believe it to be the Seed of all Metals.

The Astrologers and Alchemists join in their Opinions herein, and affirm this as an uncontestable Truth, that there is a great Correspondence between the seven Metals and the seven Planets in their Influences, which flow the one from the other, and serve reciprocally for their Nutrition. And though this Opinion is without any Foundation, it has nevertheless many Followers, notwithstanding their finest Reasonings are but *gratis dicta*; for, excepting the Sun and Moon, there is not the least shadow of Probability, how any of the rest should communicate any Influence to any thing that grows upon this terraqueous Globe, especially subterraneous Bodies, where neither Sun nor Moon seems to have any Dominion.

A great many Physicians and Apothecaries think it sufficient to answer the Ends of their Profession, that they know the most common Drugs in Use, without giving themselves any further Trouble: But nothing is a greater Obstruction to the Progress and Advancement of Medicine than such a lazy Notion, which gives a Check to all Enquiries into the Secrets of Nature, and prevents the Discovery of an infinite Number of excellent Medicines that are unknown to us. We see that every Age has brought to light some new Drugs, and we had never known the chief Part of the best Medicines in Use among us at this Day, if the Chemists had not brought them out of the Fire, from such Metals and Minerals as the Ancients believed not only useless in Physick, but pernicious to Health. How should we have met with the *Bark*, *Ipecacuana*, &c. which produce such extraordinary Effects, if the Botanists had not carried their Enquiries into the New World? And the *Materia Medica* had never been so copious as it is now, if those who have made so many valuable Discoveries had contented themselves with such Drugs only as served their Predecessors? We likewise see, that such Physicians as practise Physick with the most Success, are such as have applied themselves most to the Knowledge of Drugs; as we have an eminent Instance in *Monf. Fagm*, First Physician to the *French King*; and some of our own Nation, who are, and have been, the greatest Ornaments to the Profession of Physick, as well as the Study of Botany, as *Dr. Morison*, *Dr. Grew*, *Dr. Sloan*, *Dr. Woodward*, *Mr. Petiver*, and others: Therefore all those who apply themselves to the Composition of Medicine, ought seriously to enquire into the Knowledge of Drugs, and to penetrate into their secret Virtues, it being certain there is not one of them that has not in it some specifick Quality for the Cure of Diseases. It is pity there are few Persons whose Leisure and Fortune will give them an Opportunity of applying all their Time to this Business; but I am persuaded, that any Physician or Apothecary that would use a little Industry this way, might, in the Course of his Life, discover the particular Virtues of at least some one Drug; and this would, in Time, enrich the Practice of Physick with a great many more Simple Medicines, that are surer, safer, and more efficacious than those we use at this Day.

THE
PREFACE of the EDITOR
OF THIS
FOURTH EDITION.

THE Author of this useful Work appears to have been a Man of great Candour and Openness in the Discovery of every thing he knew regarding his Subject; and, what is perhaps a Merit more than equal to that or any other, in the Author of a Treatise of this kind intended for general Use, a Person of the strictest Probity; to this he had added an uncommon Industry and Application to his Business, as a Druggist, for a long Series of Years, and by being himself daily conversant among the Objects he had to describe to others, he seems to have made himself much better acquainted with the external Appearances and Differences of Drugs, and the various Accidents they are subject to, than any Author who had wrote before him. With these Qualifications, the World could not but expect a valuable Work from him, on a Subject he so well understood; and his Countrymen, when the Book appeared, declared that he had not fallen short in it, of what they expected from him: Indeed we find him every where talking as if he had the Substances treated of before him; his Descriptions are clear, succinct, and distinctive; his Cautions against Deceits are not calculated from the Figments of a fertile Invention, but given from the Memory of Sophistications by which himself had, at some time or other, suffered: and his Directions how to know the good from the bad in every Species, are a Lesson that every Druggist, Chemist, and Apothecary, ought to have eternally in Memory.

If the Work has, among us, been accused of some Inaccuracies, it is but Justice to the Author to observe, that it was in many Cases the *English* Translator, and not he, who was chargeable with them; and if there are some Instances in which we can perceive Errors in his Accounts of the Drugs, it is owing to the Discoveries made in later Times, of Things not so much as suspected by the best Judges at the Time of his publishing this Work.

In this Edition, the gross Errors of the Translator are amended, and the Author is set in the just Light he deserves, and his Sense rendered clear where it was before mistaken or left obscure : And as the Improvements made in all Parts of natural Knowledge since his Time have been very great, whatever might seem necessary for the farther instructing the young Student in the true Nature and Properties of the Body described, is here added at the End of the Chapter, from the Writings of the *French Academicians*, of *Reaumur* and *Geoffroy*, in their particular Treatises, from our own *Dale*, and from such others as have given Lights into the Subject unknown to these; and sometimes from Accounts or Observations later than the Works of any of them.

The Reader will not be displeased to find, that what is added of this kind is not spun out into an unnecessary Length, by Observations foreign to the Intent of the Work ; the Design not being to enter into the Detail of all the Particulars, in regard to each Subject, as a Matter of Science, or to give Botanical, or other compleat Treatises on the Bodies under Consideration ; but to point out the Nature and Properties of each as a Drug ; that is, as it becomes the Subject of this History ; with just enough of its Characteristicks or Description, for the distinguishing it from other Things of the same kind. Those who want to be further informed of the general History of the Subject, are referred to the Page or Chapter of some of the Authors of the greatest Credit who have treated more largely of it.

The *English* Translation having been made from the first Edition of the Original, it has been judged necessary to add here the more material Part of what was afterwards added to it in the succeeding one, published by the Son of the Author ; and as there are some few Drugs in use among us, which by Inadvertency were passed over in silence by this Author, there are added short Accounts of them, by which they may be known when genuine, and by which the Sophistications, not less frequent in the Shops of *London* than in those of *Paris*, may be avoided.

JOHN HILL.

A N

A C C O U N T

O F T H E

NAMES of AUTHORS

cited in this Work.

A.

ACOSTA, (*Christopher*) an *African* Physician and Surgeon, who made a Treatise of Drugs and Medicines in the Year 1582, which was translated into *Latin*, then into *French*, and printed at *Lyons* in *Octavo*.

Adversariorum Opus, done by *Peter Pena* and *Matthew Lebel*, both Physicians. This Book was printed at *London* 1570, at *Antwerp* 1576, and reprinted at *London* 1605, in *Folio*.

Agricola (*George*) of the Rise and Causes of subterraneous Productions. Book the Fifth, of the Nature of those Things which spring from the Earth. Book the Fourth, of the Nature of Fossils. Book the Tenth, of old and new Metals. Book the Second, *Bermannus*, or a Dialogue of metallick Affairs, being a *German* Interpretation of metallick Terms.

Aldinus: An exact Description of several scarce Plants, contained in the *Farnesian* Garden at *Rome*. Printed there 1625, in *Folio*.

Aldrovandi, (*Ulyssis*) *Dendrologia*, printed at *Bononia*, in *Folio*.

Alpinus, see *Prosper Alpinus*.

Amatus Lusitanus, upon the five Books of *Dioscorides*; to which is added the Names of Plants in several Languages; printed at *Straßburg* 1554, in *Quarto*.

Androsifus Hyacinthus, his *Phytologia* of the Garden at *Bononia*, or the first Tome of the first Part of Plants; printed at *Bononia* 1666, in *Folio*.

Anguillaria, (*Alofius*) Third President of the Garden at *Padua*, his Opinion of several Plants; a small Work divided into fourteen Parts; with the Works of *John Marinell*. in *Italian*: To which are added two Figures, one of the *Ghamælian-Thistle*, and the other of the Tree *Hause-leek*; printed at *Venice* 1691, in *Octavo*.

Apuleius Platonicus, of the Virtues of Herbs, joined with a Demonstration of the Herbs to every single Sign of the *Zodiack*, and also of the errattick Stars, or such as are not fixed; printed at *Paris* 1528, in *Folio*.

Barbarus,

B.

Barbarus, (Hermolaus) his five Books of Additions upon *Dioscorides*; printed at *Colegn* 1530, in *Folio*.

Bellonius: These Works are translated by *Clusius*, and placed in the second Volume of Plants, printed at *Antwerp*. There are, besides, printed at *Paris*, several Treatises of the same *Belon*, of coniferous and ever-green Plants, in *Quarto*. Of the wonderful Excellency of the Works of the Ancients, in *Quarto*. Of embalming the Dead, in *Quarto*.

Benxonts, (Hieronymus) his History of the New World, rendered into *Latin* by *Urbanus Calvatones*; printed at *Geneva* 1600, in *Octavo*.

Boccones, (Paul) his Figures and Descriptions of choice Plants; printed 1674.

Boetius de'Boot of *Bruges*, Physician to the Emperor *Rodolph* the Second, his History of Gems and Stones; printed at *Leyden*.

Bontius, (James) a Physician of *Batavia*, who writ six Books of the Natural History of the *East-Indies*, but being prevented by Death left them unfinished: Afterwards *William Piso* reduced them into Order, illustrated and published them together with the Natural History of the *West-Indies*; printed at *Amsterdam* 1658, in *Folio*.

Botanicum Montpelienſe, the *Montpellier* Botanist; printed at *Leyden* 1676, in *Octavo*.

Breynius, (James) of *Exoticks*, &c.

Brunfelsius, (Otto) his *Latin* History of Simples, with Cuts, in three Volumes; the first published 1530, another in 1531, and a Posthumous Work, in 1536; printed at *Straßburgh*.

C.

Caspar Baubinus's Pinax, or Store-house of Botanical Rarities; printed at *Basil* in 1623, and re-printed at the same Place, with some Alterations, in 1671, in *Quarto*.

Cæsalpinus, (Andreas) Aretinus, Professor in the University of *Pisa*, his sixteen Books of Plants; printed at *Florence* 1583.

Camerarius, upon the *Epitome* of *Matthiæolus*; printed at *Frankfort* 1586, in *Quarto*.

Camerarius, on the Medical and Philosophical Garden; published at *Frankfort* 1588, in *Quarto*.

Cardanus, (Hieronymus) of the Variety of Things; seventeen Books, printed at *Basil* 1581, in *Octavo*.

Castor Durante's New Herbal; printed at *Rome* 1585; and at *Venice* 1684, in *Folio*.

Clusius, (Charles) his Appendix of the History of Plants, or his Description of several Roots as yet unknown; printed at *Antwerp* 1611, in *Folio*.

Clusius, of Exotick Plants, ten Books; printed at *Antwerp* 1605, in *Folio*.

Clusius's History of scarce Plants; printed at *Antwerp* 1601, in *Folio*.

Clusius's History of several rare Plants observed throughout *Spain*.

Clusius's History of several scarce Roots observed throughout *Pannonia, Austria*, &c.

Columnæ, (Fabii) Phytobasanas, with Cuts; printed at *Naples* 1592.

Two Parts of the same Author, of the less known Plants; the first of which contains One hundred sixty-one Figures, printed at *Rome* 1616; the other, forty-four Figures, printed at the same Place 1616.

Cordus, (Valerius) his Annotations on *Dioscorides*.

The History of Roots by the same Author, in four Books, with several Cuts from *Tragus*, and some new ones added by *Gesner*.

A *Sylva* of Observations, which were likewise published together by *Gesner* at *Straßburgh* 1561, in *Folio*.

A Dispensatory of the same Author.

Cornutus, (James) a *Parisian* Doctor, his History of the Plants of *Canada*, and others not known before; printed at *Paris* 1635, in *Quarto*.

Cornarius,

Cornarus, (Jamus) who undertook *Dioscorides*, and added Cuts to every Head; printed at *Basil* 1557, in *Folio*.

Cortusius, (Jamus) Anthony, a Senator of *Padua*, and President of the Physick-Garden there, and who published nothing but a Catalogue of the *Padua* Garden, with the *Area* or Plans of the same; printed at *Venice* 1591, in *Octavo*.

Costeus, (John) concerning the whole Nature of Plants, in two Books, printed 1578, in *Quarto*.

Annotations of the same Author upon the *Museum*, with the Works thereof; printed at *Venice* 1570, in *Folio*.

Crescentius, (Peter) of *Bononia*, of the Parts of Agriculture, with the Nature and Usefulness of Plants; printed at *Basil* 1548, with some Cuts.

D.

Dalechamp's History of Plants in two Volumes; printed at *Lyons*, in *Folio*.

De la Duguerie, (John Baptift) his *Lexicon Medico-Etymologicum*.

Dioscorides of the *Materia Medica*, five Books in *Greek*, of which there are various Editions extant in *Greek* and *Latin*, with the Interpretation of *Marcellus Virgilius*, *Goupius Affulanus*, *Johannes Ruellius*, *Johannes Conarius*, *Johannes Antonius Saracenus*, and others.

Six Books of the said *Dioscorides*, with *Ruellius's* Notes, and small Cuts 350; to each Chapter of which is added compendiary Annotations of the second Edition: Also thirty Figures of Roots not before delineated; by *Jamus Dalechamp*; printed at *Lyons* 1552, in *Octavo*.

Dodonaeus, (Rembertus) of *Mechlin*, Imperial Physician, his History of Roots, in thirty Books; printed at *Antwerp* 1616, in *Folio*.

Dodonaeus's French History of the same, by *Clusius*.

The *Belgick* History, by the same Author.

F.

Furcius Cordus's *Botanologicum*, or Discourse of Botany, by way of Dialogue; printed at *Cologne* 1534, in *Folio*.

The Garden of *Eyseltensis*, described by *Basilius Beslerus*; printed at *Norimbergh* 1613, in *Folio*.

Fracaetorius's Works; printed at *Lyons* 1590, in *Octavo*.

Fragesus, (John) Physician and Surgeon to the King of *Spain*, his History of Aromaticks, Fruits, and Simples, that are brought from both the *Indies* into *Europe*; published by *Israel Spachius*, a Physician of *Strasbourg*, and printed at the same Place 1616, in *Octavo*.

Fuchsius's Commentaries on the History of Roots; printed at *Basil* 1542, in *Folio*.

G.

Galenus, (Claudius) of *Pergamus*, the most eminent after *Hippocrates*.

Garzias ab Horto, Physician to the Viceroy of the *Indies*, his History of Aromaticks and Simples that have their Growth in *India*, digested into an Alphabetical Order, and round writ in the *Portuguese* Language, by the way of Dialogue, but contracted by *Clusius*, and rendered into *Latin*. This Book was translated into *French* under the Title of *The History of Drugs, Spices, and simple Medicines*.

Gerard, (John) his History of Plants, in *English*; printed at *London* 1597, in *Folio*.

Gerard's History enlarged by *Jabusen*; printed at *London* 1636.

Gesner, (Conradus) of the Gardens of *Germany*.

Gesner, of the Collection of Roots.

Gesner's Catalogue of Plants, in four Languages.

Gesner, on the Nature of Fossils, Stones, and Gems, with Figures, &c. printed at *Zurich* 1565, in *Octavo*.

Guilandinus, (*Matthioli*) Fourth President or Governor of the Garden at *Padua*, his Apology against *Matthioli*; printed at *Padua* 1558, in *Quarto*.

Gulielmus Piso, Physician at *Amsterdam*, his Natural and Medicinal Account of both the *Indies*; printed at *Amsterdam* 1658, in *Folio*.

H.

Haridt, (*Thomas*) his Description of *Virginia*; *Clusius* turned it into *Latin*, and this is the first Part of the *West-Indies*.

Hermannus. See H. L. B.

Harmander, (*Francis*) his History of Plants, Animals, &c. of *Mexico*; first compiled by this Author, and afterwards digested into a Volume by *Nardo Antonio Reccho*; printed at *Rome* 1651, in *Folio*.

Hermolaus Barbarus, his five Books of Commentaries on *Hippocrates*; printed at *Cologne* 1530, in *Folio*; and the same Author's Corrections of *Pliny's* Natural History; printed at *Basil* 1534, in *Folio*.

Hieronymus, or *Jerome* of *Brunswick*, his plain German Proof: To which is added, *Brunfelsus's* Herbal; printed at *Strasburgh* 1531, in *Folio*.

Hippocrates's Works.

Honorius Bellus Vincentinus, a Physician of *Crete*, his Epistles of Plants, writ to *Clusius*; to which is added the History.

Hortus Medicus Edinburgensis, the Physick Garden at *Edinburgh*, or a Catalogue of Plants there, by *Jacob Sutherland* of *Edinburgh* 1683, in *Octavo*.

Hermannus's Catalogue of Plants of the Garden at *Leyden*, by *Paul Hermannus*, Professor of Physick and Botany in that University; printed there 1687.

Hortus Malabaricus Indicus.

Hortus Regius Blesensis; printed at *Paris*, 1655.

Hortus Regius Parisiensis, The Royal Garden of *Paris*, 1655.

I.

Johannes Bauhinus's History of Plants, carried on by *Henricus Charleus*, Doctor of *Basil*, and enlarged by *Chabræus* of *Geneva* 1650, in *Folio*.

Imperatus Ferantes, a *Neapolitan* Apothecary, published a Natural History in twenty-eight Books, with Figures of Stones, Corals, Sponges, &c. and of Plants and Fruits, thirty-three; printed at *Naples* 1599, and *Venice* 1672, in *Folio*.

Ten Parts of the History of the *West-Indies*, with an Addition to the ninth Part, in *Folio*.

Ten Parts of the *East-Indies*, in *Folio*.

• *Johnston's* Natural History of Animals, with Copper-cuts; printed at *Amsterdam* 1657, in *Folio*.

L.

Lacuna, (*Andrew*) his Commentaries on *Dioscorides*, with Figures; writ in *Spanish*, and printed at *Salamanca* 1552, in *Folio*.

Lemnius, (*Levinus*) of sacred Plants; printed at *Lyons* 1595, in *Octavo*.

Lerius, (*Johannes*) writ the History of *Brasil*, first in *French*, then in *Latin*; printed at *Geneva* 1594.

• *Linscotus*, (*John Hugh*) his Itinerary and Voyage into the *East-Indies*, belonging to the *Portuguese*; with the Annotations of *Bernardus Paludanus*; printed at the *Hague* 1599, in *Folio*.

Lobellius, (*Matthew*) his Figures of Plants and Roots; printed at *Antwerp* 1581, in a long Form in *Quarto*.

His Illustrations of Roots, together with the further Care and Diligence of *William How* an *Englishman*; printed at *London* 1655, in *Quarto*.

Lobellius's Observations and History of Plants and Roots; printed at *Antwerp* 1576, in *Folio*.

Lonicerus, (*Adam*) this was the Herbal of *Eucharius*, writ in *High-Dutch*, and afterwards published under the Name of *Adam Lonicerus*, with 833 Cuts, about the Year 1582, at *Frankfort*.

Ludovicus Ruggius his Voyage into the *East* : Seven Books, with the Notes of *Archangelus Madriguanus* and others, who have described the New World.

A General History of Plants of *Lyons*, by *Gulielmus Rouillius* 1586 ; it is usually called *Dalechamp's* History, in *French*.

M.

* *Malpighius*, (*Marcellus*) his Anatomy of Plants ; printed at *London* ; in *Folio*.

Marcgravius, (*George*) his eight Books of the Natural History of *Brazil* ; this Work was printed in *Holland* with that of *Piso*, in the Year 1648, in *Folio*.

Matthiolus his Commentaries on six Books of *Dioscorides*, &c. printed at *Venice* 1565.

Matthiolus quoted by *Lobellius* in the Book intituled *Icones Lobellii*.

Matthiolus on the *Venice* Edition 1565.

Montrelius, chief Physician to the Elector of *Brandenburgh*, his universal Index of Names of all the Plants, in several Languages ; with a small one of the scarcest Plants, and some Figures cut in Copper ; printed at *Berlin* 1682, in *Folio*.

Mesue's Works, of the Choice of cathartick or purging Medicines, with the Correction and Use of the two Books, whereof the first are the general Canons, and the second treats of Simples ; printed at *Venice* 1623, in *Folio*.

Monard, (*Nicholas*) a Physician of *Seville*, his History of simple Medicines brought from *America* ; writ first in *Spanish*, then done into *Latin* by *Clusius*, and afterwards translated into *French* by *Antony Colin*, Apothecary at *Lyons* : This Work was printed with that of *Garzias ab Horto* and *Acosta*, in the Year 1619, in *Octavo*.

Morison's Universal History of Plants ; the second Part by *Robert Morison*, Botanick Professor at *Oxford*, printed there 1680, in *Folio*.

The *Hortus Regius Blesensis*, enlarged by *Robert Morison* ; printed at *London* 1669, in *Octavo*.

Morison's Botanick Preludes.

N.

Norison's New Description, or ranging of umbelliferous Plants ; printed at *Oxford* 1672, in *Folio*.

* *Nehemiah Grew's* New Anatomy of Plants ; printed at *London* in *Folio*.

Nicander's Treacle and Alexipharmacks, with the *Greek* Readings, or *Scholia* of an uncertain Author ; printed at *Venice* 1523, in *Quarto*.

An Edition of the same Author, with the *Greek* and *Latin* Readings of *Gorræus* ; printed at *Paris* 1557, in *Quarto*.

O.

Oviedus Gonzalvus Ferdinandus his general History of the *West-Indies* : This Work has been turned into *French* by Mr. *Duret*. In *Octavo*.

P.

Paludanus Bernardus's Notes on the *Indian* History of *Linscotius*, with the Addition of Indexes, &c.

Paul Herman's *Prodromus* of the *Batavian* Paradise ; printed at *Amsterdam* in *Octavo*.

Parkinson's *Terrestrial Paradise*, in which is contained a History of all Flowers, Fruit-Trees, &c. that are cultivated in Gardens or Orchards ; printed at *London* 1629, in *Folio*.

Parkinson's *Theatrum Botanicum* ; printed at *London* 1640, in *Folio*.

Petrus Pena. See *Adversariorum Opus*.

Palus Renssalvus Blesensis his Specimen of the History of Plants, with Copper-cuts ; printed at *Paris* 1611, in *Quarto*.

Philip Pigafetta's History of the Kingdom of *Congo*, &c.

Pileterius, (Casper) of the Plants growing in *Zeland*, in an Alphabetical Manner; printed at *Middleburgh* 1610, in *Octavo*.

Piso. See *Gulielmus Piso*.

• *Pliny's* History, in which several Things are extant concerning the Culture and Virtue of Plants. This Work was translated into *French* by Mr. *Dupinet*, and printed at *Lyons* 1581, in *Folio*.

Pitton Tournesfort's Elements of Botany, or the Method of knowing Plants; printed at *Paris* at the King's Charge 1694, in *Octavo*.

Leonard Plukenet's *Phytographia*; the first Part printed at *London* 1691, in *Folio*.

Father *Plumier's* Description of *American* Plants; printed at *Paris* 1693, in *Folio*.

Pona (John) Apothecary at *Verona*, his Catalogue of Simples growing in *Montebaldo*, with the Description of several others, and sixteen Figures, adding *Clusius's* History of rare Plants. This Work, after several Editions, was translated into *Italian* by Francis *Pona*, Doctor of Physick, and the Author's Son; printed at *Venice* 1617, in *Quarto*; at *Basil* 1608, and at *Antwerp*, in *Folio*.

Prosper Alpinus of *Egyptian* Plants; printed at *Venice* 1633, in *Quarto*.

Prosper Alpinus's two Books of Exotick Plants; printed at *Venice* 1656, in *Quarto*.

Johannes Baptista Porta, a *Neapolitan*, twelve Books; printed at *Frankfort* 1592, in *Quarto*: This Author writ several other Works, especially the *Physiognomy*, or History of several Plants, adorned with Figures, in *Octavo*.

Q.

Quadramius, a Divine, and Botanist to the Duke of *Ferrara*, writ a Treatise of Treacle and Mithridate; printed at *Ferrara* 1597, in *Quarto*.

R.

Ray's Catalogue of *English* Plants, and the Isles adjacent; printed at *London* 1677, in *Octavo*.

Ray's History of Plants; printed at *London* 1686, in *Folio*.

Ray's Methodical Synopsis of *British* Roots, by the same Author, John *Ray*, Fellow of the Royal Society; printed at *London* 1690, in *Octavo*.

Rauwolfius, (Leonard) his Description of several Plants in his Travels into the *East-Indies*, and their Cuts; printed 1583, in *Quarto*.

Renodæus, (John) his five Books of Pharmaceutical Institutions; to which are added three of the *Materia Medica*; printed at *Paris* 1608, in *Quarto*.

Robini Hortus, or the Garden of John *Robin*, Royal Botanist to Henry IV. of *France*, with 214 Figures; printed at *Paris* 1608, in *Folio*.

Rondeletius of Fish, printed at *Lyons* 1554.

Ruellius's Translation of three Books of *Dioscorides* into *Latin*, concerning the Nature of Roots; printed at *Bril* 1557, in *Folio*.

S.

Scaliger, (Julius Caesar) his Animadversions upon six Books of *Theophrastus*, of the Causes of Plants; printed at *Geneva* 1566, in *Folio* and *Octavo*.

Schola Botanica, printed at *Amsterdam* 1689, in 12°.

Schreder's *Pharmacopœia Medico-Chymica*, whereof there are several Impressions.

Schwencfeldius's Catalogue of the Roots and Fossils of *Silesia*; printed at *Leipsick* 1601, in *Quarto*.

Suvertii Florilegium, in which, besides the many Figures, there are forty-seven Plants from both the *Indies* not described before; printed at *Frankfort* 1612, in *Folio*.

Sylvatici, (Matthæi) *Opus Pandectarum*; printed at *Venice* 1499, in *Folio*.

T.

Tabernaemontanus his *German* History, published in three Parts, with 2087 Figures; printed at *Frankfort* 1588, in *Folio*.

The same enlarged with the Description of Plants, Cuts, and several Medicines, by *Casper Babinus*, in the Year 1613, in *Folio*.

The Figures or Prints of the same, with the bare Names in *Latin* and *Higb-Dutch*; printed at *Frankfort* 1590.

Thalius, *Sylva Hercynia*, or a Catalogue of Plants, growing naturally on the Mountains and Parts adjacent to *Hercynia*; printed at *Frankfort* 1588. This Catalogue is usually joined to and adorned with the Medicinal Garden of *Camerarius*.

Theophrastus's History of Plants, the *Greek* Edition, printed at *Venice* 1552, in *Octavo*; at *Basil* 1541, in *Quarto*; and *Gaza*'s Version at *Lyons* 1552, in *Octavo*, with *Jordan*'s Correction.

Theophrastus Erasmus's ten Books of the History of Plants, which *Bodaeus* illustrated; printed at *Amsterdam* 1644, in *Folio*.

Thevet's Cosmography, in *French*, published with several Figures of Plants and Animals. The same Author has writ in *French*, a History of what is singularly remarkable in *New France* in *America*; whereunto are added twelve Figures of Plants; printed at *Paris* 1557, in *Quarto*.

Tragus his History, which was often published at *Straßburgh* in the *German* Language, in *Folio*, but now is translated into *Latin*, with 567 Cuts, though they are described to 800; printed at *Straßburgh* 1522, in *Quarto*.

Turner, (*William*) his History of Plants, in *English*, with some Figures; printed at *London* in *Folio*.

V.

Veslingius's Observations upon *Prosper Alpinus*, concerning *Egyptian* Plants; printed at *Padua* 1638, in *Quarto*.

Virgilius Marcellus's Interpretation of *Dioscorides*, with Commentaries of the same; printed at *Cologn* 1529, in *Folio*.

Z.

Giacomo Zanoni's Herbal, taken from the publick Phylick-Garden at *Bologna*; printed there 1675, in *Folio*.

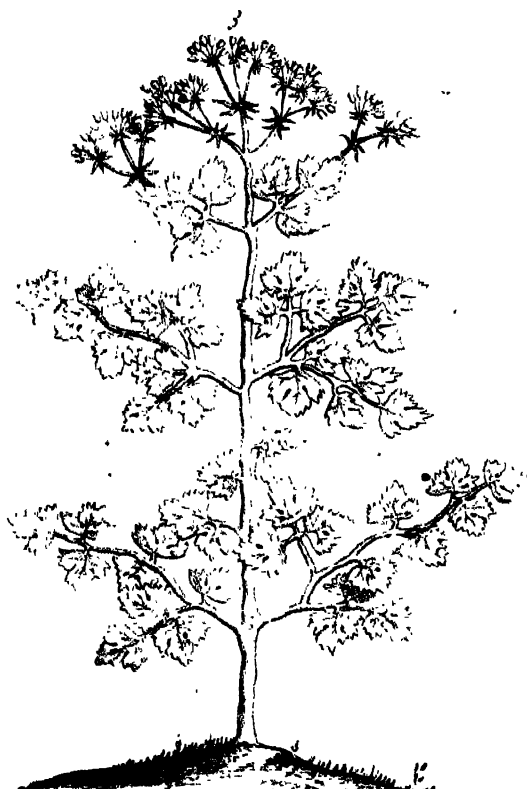




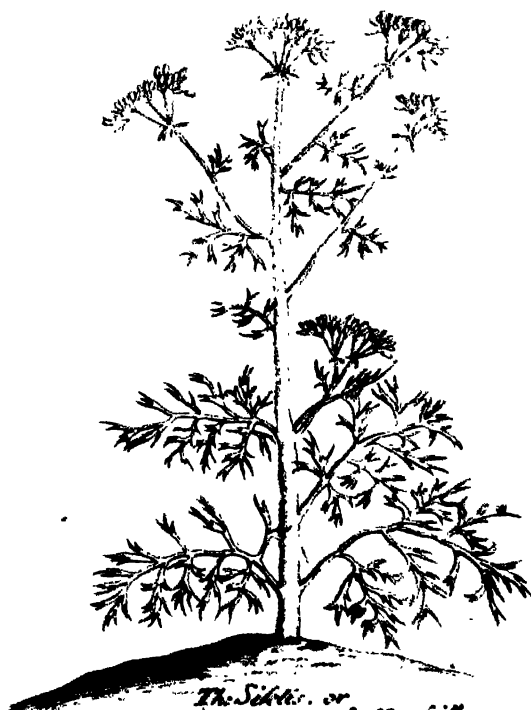
The Wormseed Plant



The Seed and Cheilan



Petroselinum Macedonicum.
Macedonian Parsley



The Seltis, or
Hartwort of Marjilles

P O M E T's GENERAL HISTORY OF D R U G S:



With what has been farther observ'd by *Lemery, Tournefort, &c.* on the same Subjects.

B O O K I.

C H A P. I.

Of S E E D S.

I. Of Wormseed.

Pomet. **W**ORMSEED has its Name from its principal Virtue, which is to destroy all Kinds of Worms generated in human Bodies; particularly those in Infants or young Children. It is likewise call'd *Santoline*, or *Xantoline*, *Semen Sanctum*, the Holy Seed, *Semen Santonicum*, *Semencine* and *Barbotine*. It is a small Seed, which the *Persians* trade in by their *Caravans* from *Aleppo*, *Alexandria* and *Smyrna*, and which is afterwards transported to *England*, *Holland* and *France*.

The Plant which bears the *Wormseed*, has such small Leaves, that it is difficult to separate them from the Seed; for this Reason, those of the Kingdom of *Boutan* winnow it in proper Baskets, to separate the Leaves, which fly off, in a Kind of Powder. Some Authors affirm this *Wormseed* to be the Seed of a Sort of *Wormwood* which is call'd *Santonique*, because it grows in *Xaintonge*: But this is not worth disputing about, since what is generally sold we know grows in *Persia*, and

on the Borders of *Muscovy*, as Letters which I have received upon several Occasions assure me, and as you may be satisfy'd from Mr. *Tavernier*, in the Second Volume of his Travels, Page 384, in these Words:

As to what regards the *Semencine*, or *Wormseed*, it is not to be gather'd like other Seeds. The Herb which bears it is common enough, but must be suffer'd to stand 'till it is ripe; and the Misfortune is, that when it approaches to its Maturity the Wind shakes off a great Part of the Seed, which falls among the Weeds and is lost; and this it is which makes it dear. They never dare touch it with their Hands for fear of spoiling it, and when they are to shew it they take it in a Bason. When they gather what remains upon the Plant, this is the Management by which they do it; they take with them two Hand-Baskets, and walking into the Places where it grows, they move one of the Baskets from Right to Left, and the other from Left to Right, as if they were mowing the Herb, always laying hold of it by its Top, which is the Part where the Seed grows: The Seed thus falls into the Baskets.

There is *Wormseed* also growing in the Province of *Kerman*; but it is not so good as that of *Bentan*, and scarce any more is gather'd there than what is used upon the Spot.

This Seed is not only good against Worms in Children, but the Northern Nations use it like *Wormseed* in Confits and Sugar-Plumbs.

You ought to chuse that which is well-fed or plump, of a greenish Cast and well-tasted, and take care that it be very clean, and have nothing sticking and clinging to the Seed; for that will increase the Price considerably. You must take care it be not too green, and that *Southernwood* be not imposed on you for this, tho' they are easily to be distinguish'd; for the *Wormseed* is moderately large, long and greenish, and the Seed of *Southernwood* is light and yellowish, more resembling a Chaff cut very small than a Seed; add to this, that the *Wormseed* is bitterer and more aromatick.

The *Wormseed* is so well known and commonly used, that we need not speak of its Virtues: Its Bitterness is the Reason that it is generally cover'd with Sugar; and this Way makes what we call *Wormseed Sugar-Plumbs*.

When it is taken otherwise it should be beat to Powder and taken in any convenient Liqueur, or made into a Bolus from half a Scruple to a Dram, for a Dose.

Chuse your *Wormseed* always as new *Lemery*. and fresh as you can, clean and round, of the strongest Taste and most fragrant Smell: It contains a great deal of Oil, with volatile and essential Salt in it: It is very proper for the Destruction of Worms, excites the Courses of Women, suppresses Vapours, strengthens the Stomach, causes a good Digestion, and adds a lively Colour and Complexion to the Face. The Dose, from half a Scruple to a Dram, in Powder, to be taken in the Morning fasting, or in an Infusion in Wine, or made into Confects, to be eat with roasted Apples Evening and Morning. The chymical Oil is excellent to anoint the Stomach or Belly with for the same Purposes. A compound Powder may be made thus: Take *Wormseed* two Drams; Powder of *Coraline* one Ounce; *Ethiops Mineral* half an Ounce: Mix them: Dose, from half a Dram to a Dram, fasting.

[This is the Seed of a foreign Species of *Wormwood*, call'd *Alexandrian Wormwood*, or the *Wormseed Plant*. The *Abfinthium Santonicum Alexandrinum* five *Sampina* is *semen Sanctum*. Park. 102. *Abfinthium Santonicum Judaicum*. R. Hist. 1. 368. Hist. Ox. 3. 8. It is a Plant of about two Feet high, the Stalk is hard and woody, the Leaves are large and finely divided, of a greyish

or ash Colour rather than green; the Stalk divides into many Branches towards the Top, which are thick set with small Leaves and numerous Clusters of Seeds; these upper Leaves are those small ones which, as *Pomet* observes, it is hard to separate from the Seeds.]

[The Seed is small, light and chaffy, composed of a Number of thin brittle Membranes, set on a short Pedicle, and easily falling into Powder, on being rubb'd between the Fingers.]

2. Of the Choïan in French, or Carmine-Seed.

THIS is a little light Seed, of a yellowish green Colour, the Taste *Pomet*. something biting; and much resembling the *Wormseed*, except that it is much larger and lighter.

This Plant grows low, and carries its Seed in little Bunches or Clusters on its Top, in a Manner little different from the *Wormseed*.

I have found it impossible to know positively the Place of Growth of the Plant which bears the *Choïan*; all that I have been able to learn of it has been from some Persons of the Retinue of *M. de Guillerague*, who went Embassador from the King of France into Turkey, who at their Return brought a considerable Quantity of it to Paris with them.

If you would know how to chuse the best Seed, you must take that which is greenish, the largest, and best clean'd or dress'd, and least fill'd with Specks, like Holes in rotten Wood.

It is of no other Use, that I know of, in France, but to make *Carmine*, and for the Feather-Men who dye with it, but at present münd it very little.

This Author agrees with the former in the Description and Use of this *Ela-Lemery*. tick; which he says is like *Wormseed*, but in Taste a little pungent; it grows upon a Shrub-Plant, plumb'd on the Tops like a *Nosegay*; it is brought from the *Levant*, and used for *Carmine*.

[This is the *Santonium viride*, Offic. Dale's Pharm. 100, the green *Wormseed* of the Shops; it is supposed to have the same Virtues with the former; but is so seldom imported that the Name of it is almost lost. It is probably the Seed of some foreign *Wormwood*; but no Author has yet ascertain'd the particular Species.]

3. Of Macedonian-Parsley.

Macedonian-Parsley is a Plant which *Pomet*. resembles, in some measure, our Garden Parsley; but the Seed is a great deal

deal less, much longer and sharper pointed; it grows in Clusters like *Fennel-Seed*. This Plant receives its Name from the Kingdom of *Macedon*, where it grows naturally, and from whence the Seed is transported, which is almost the only Part of it that is used in Physick.

Make choice of the newest Seed, and such as is clean, well fed, longish, and of a brownish green Colour; let it be well-tasted and aromack, which are the chief Distinctions of the Goodness of *Macedonian-Parsley*: There are some who very improperly use our common Parsley-Seed, and others again a Sort of black Seed from the large *Smallage*, which the Gardeners falsely call *Macedonian-Parsley*. *Andromachus*, Physician to *Nero*, General of the *Roman* Legions, in the Time of the War betwixt the *Romans* and *Hannibal*, invented a Treacle, which we now call *Venice-Treacle*, in which he put this Seed, by the Name of *Macedonian-Parsley*, as it is a powerful *Alexipharmack*, or Resister of Poison or Pestilence.

It may be taken early in the Morning, half a Dram in a Glass of Wine, or other Liquor proper to the Disease.

Says it is the same Species of *Parsley* *Lemery*. with ours; but the Leaves are much larger, and a little more indented; the Seed abundantly smaller, longer, sharper pointed, and more aromack. This Plant grows in *Macedon*, from whence the dried Seed is brought hither.

The Choice of it ought to be the same as before directed. It contains a great deal of exalted Oil and volatile Salt; it is aperitive, excites to Urine, provokes the Monthly Courses, resists Poison, and expels Wind; it is Lithontriptick, or a powerful Breaker of the Stone in the Kidneys; and apply'd in the Form of a Cataplasm, eases Pain, and abates the Raging of the Gout, especially from a cold Cause. This Seed may be used either in Powder, Decoction, Tincture, chymical or express'd Oil, and in the distill'd Water it is opening, cleansing, diuretick and sudorifick, and therefore is used in the Composition of the great Treacle of *Andromachus*.

[This is the Seed of a Species of Parsley call'd *Petroselinum Macedonicum verum*. Ger. 864. *Apium Macedonicum*. H. Ox. 3. 394. It is a Plant of about two Feet high, with Leaves like those of the common Parsley, only that they are a little hairy and more notch'd on the Edges. The Stalk is divided into many Branches at the Top and beset with Clusters of white Flowers, which are follow'd by the Seeds before describ'd. It is a common Plant in many warm Countries; but will not bear the Cold of our Climate.]

4. Of Sefeli of Marfeilles.

THIS *Sefeli* takes its Denomination from *Marfeilles*, which is its *Pomet*. native Climate, though it flourishes more in several other Parts of *Provence* and *Languedoc*. It is a Plant which passes for a Kind of *Fennel*, and is by many Authors call'd *Feniculum tortuosum*, or *Crooked Fennel*; but it has fewer Leaves than the common *Fennel*, and those not so long, nor is the Stalk so strait or high, but more naked, and the Branches less regular, spreading themselves wider on the Sides near the Bottom. We use the Seed, which grows by Clusters on the Tops, after the same Manner as *Dill*. When it comes to Maturity it looks very much like the wild *Fennel*.

This Seed ought to be of a moderate Size, longish, heavy, well clean'd and of a greenish Colour.

There are several other Sorts of *Sefeli*; as that of *Candy*, *Peloponnesus*, or the *Morea*, *Ethiopia*, &c. but as it is only the Seed of the *Sefeli* of *Marfeilles* that is in use, I shall not mention the others, but refer you to the Authors that treat of them. Some assign the same Virtues to this *Sefeli* of *Marfeilles* as was given to the *Parsley* of *Macedon*; and some Botanists call it the *Siler Montanum*, or *Sefeli* of the Mountains.

The Carriers who bring from *French Comté* the *Berne* and *Valtelline* Cheeses, and Sweetmeat Boxes, sometimes bring us also, in little Bales, a Seed which they call *Sefeli*, larger and of a stronger Smell than that of *Marfeilles*, which they give their Cattle that bring their Goods to fatten them, that they may sell the better at *Paris*.

The *Latin* Authors call it by these Names, *Sefeli Massiliense*, or *Sefeli* of *Lemery*. *Massilia*; *Sefeli Massiliense Feniculi folio Dioscoridis censetur*, *Feniculum tortuosum*, according to *Bauhin* and *Fournesfort*; *Sefeli Massiliense folio Feniculi crassiore*, *Ad Lobel*, or the *Massilia Sefeli* with the thicker *Fennel* Leaf; *Feniculum Petraeum*, or *Rock-Fennel*.

After he has given the same Description of it as *Pomet*, he says, it grows in sandy Places in the hot Countries, as in *Languedoc*, *Provence*, and about *Marfeilles*: The Seed is used in Physick, and brought to us dry; it ought to be chose moderately large, fresh, and of a grateful Smell; then it affords a great deal of essential Oil and volatile Salt, is hot and dry, incides, opens, dissolves; it is cephalick, neurogick, pectoral and nephritick; good against Epilepsies, Apoplexies, Megrims, Vertigo's, Lethargies, Cramps, Palsies, Convulsions, Coughs, Colds, Catarrhs, Obstructions of the Lungs, Wheelings, Shortness

of Breath, Dropfies, Cholick, Crudities in the Stomach, Wind, Obstruction of the Terms, Pain and Stoppages in the Reins and Bladder; and may be taken in Powder from a Dram or two, or infus'd in Wine, or boiled in Wine, Ale or Water; likewise the Juice may be drawn from it in Spirit of Wine.

This is the Seed of the *Seseli Massiliense*. R. Hist. 1. 412. *Seseli Massiliensis Ferula folio*. Hist. Ox. 2. 170: It is a Plant of three or four Feet high, the Leaves are like *Fennel*, but shorter and of a paler Green; the Flowers grow in Clusters on the Tops of the Branches, and are white. The Seed is said to be a Specifick against the Poyson of Hemlock.

5. Of Ammeos, Bishop's Weed, or the Ethiopian-Cummin.

Pomet. THE French call this *L'Ammi*, and *D'Ammes*. It is a Plant which has Leaves small and indented, and bears a Stem pretty high, with many Branches, which terminate in Tassels adorn'd with white Flowers, after which comes a little roundish Seed, small, and very much resembling Grains of Sand, from whence the Plant takes its Name.

The Seed is the only Part of the Plant that is in Use; it ought to be chose fresh or new, greenish, well-fed, of a little bitterish Taste and aromatick Smell: That which comes from *Alexandria* or *Creta* ought to be esteem'd before that which is cultivated in several Gardens in *France*, which has not that Taste between *Origanum* and *Thyme*, so easily observ'd in that of *Alexandria* and *Creta*, which is much the better for all Uses. It is incisive and aperitive. The Dose is from half a Dram to a Dram.

It is call'd *Semen Ammeos*, or *Ammi Lemery*. *ab Arena*; the Name being given to this Plant because the Seed is very like to Grains of Sand: It affords a great deal of essential Oil and volatile Salt, and is attenuating, cutting, aperitive, hysserick, carminative, cephalick, resists Poison, and is one of the four lesser hot Seeds; it expels Wind, is good against the Cholick and Pains of the Womb, and provokes the Menstrue; it is used in Powder from half a Dram to a Dram, in a Decoction with Wine or Water, or in a Tincture extracted with Spirit of Wine, from a Dram to two Drams.

[These are the Seeds of the *Ammi Odore Origani*. Hist. Ox. 3. 295. *Ammi creticum*. Ger. 881. They are brought from Egypt, by the Way of *Alenmania*, to which the Name is given, and thence into the other Parts of Europe. The Plant is

about two Feet high, the Stalks are slender, branched and striated, the lower Leaves broad and jagged, but the upper much more finely divided; the Flowers stand in Umbels, and are very small and white.]

6. Of Thlaspi, or Treacle Mustard.

THIS Plant is about a Foot high, and has Leaves something of a deep *Pomet.* green Colour; the Stem is charg'd with a great many Branches, bearing white Flowers, after which grow flat Pods, resembling *Lentils*. The Seeds are of a yellow Colour, tending to red, which in course of Time change to a dark red, and the older they are, the darker they grow. This Seed is oblong, and a little picked at the Ends.

You ought to chuse that Seed which is clean and fresh, of the reddish Cast, sharp and biting; and to know that it grows in the hot Countries, such as *Languedoc* and *Provence*. No Body should go to buy this at the Seed Shops, any more than any other foreign Seed, because they frequently sell the Seeds of the common Garden Cress for those of the *Thlaspi*, at such Places, to those who do not understand the Difference. But there is another Sort of *Treacle-Mustard*, whose Stem, Leaves and Pods are much less, as well as the Seed: This is altogether yellow and smaller, comes up very near to it in Taste, but is abundantly short of it in Virtue, for which Reason it ought to be rejected. I shall pass by the other Sorts of the *Thlaspi* which are out of Use.

This is particularly recommended for the Cure of the *Sciatica*, Dissolving of the Stone, and Grumous Blood; given in Powder from half a Scruple to two Scruples, in the Morning fasting.

The Root is pretty large and fibrous, woody, white, and a little acrid, or *Lemery*. biting. This Plant grows in uncultivated, wild, stony or sandy Places, much expos'd to the Sun; likewise among Corn, on the Tops of Houses, and against the Walls; it affords a great deal of volatile Salt, and essential Oil. We bring the dried Seed from *Languedoc* and *Provence*, where it grows better than in the more temperate Climates.

We chuse the fairest Seed, which is most biting and piquant to the Taste, like Mustard. It is used in the Composition of several Medicines, and is incisive, attenuating, detesive, aperitive, proper to provoke Urine, and the Terms, to hasten the Birth, and bring away the After-birth, and is very serviceable to break inward Apostems.

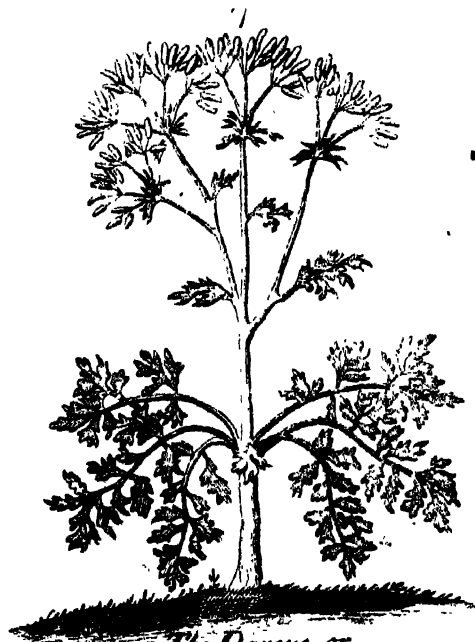
[These are the Seeds of the *Thlaspi Dioscoridis*, Ger. 204. *Thlaspi Arvensis siliquis latis*, Hist. Ox.



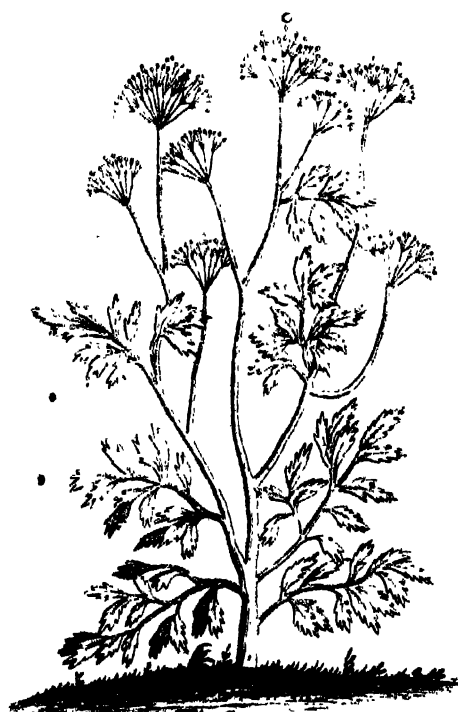
*The Amos, or
Ethiopian Cummin*



Thlaspi or Treadle Mustard



*The Daucus, or
wild Carrot of Candia*



*The Carum, or
Caraway*

Ox. 2. 293. It is a Plant of about eight Inches high, the Flowers are white and compos'd of four Leaves each; the Leaves are broad and oblong, the Seed Vessels are broad and flat, the Seeds small and dark-colour'd. It grows wild in *England*, but is not very common. The Seed is little us'd except as an Ingredient in the *Venice Treacle*.]

7. Of *Daucus*, or Wild-Carrot of Crete or Candia.

Pomet. THIS *Daucus* is a Plant very like a *Carrot*; it is a Foot and a half high, and bears on its Top several Bunches or Clusters of white Flowers; the Seeds are of a pale green, hairy and whitish, something like *Gummin-Seed*, tho' not altogether so long or big, nor of so strong a Smell; but on the contrary, their Smell and Taste are both agreeable and aromatick, especially when one has held them some Time in ones Mouth.

This Seed being downy, frequently has little Animalcules and a Dust hanging about it; this Fault encreases as the Seeds grow old, by the Particles of Matter that separate from those little Creatures; it ought to be chosen new, well fed, and the cleanest that can be found. Sometimes it is brought from *Germany* and the *Alps*; but this is not so good or useful as that which comes from *Crete*, which is only to be chose.

It is singular for the *Stone*, and those who are subject to *Wind-Cholicks*: It is ranged amongst those Medicines which are call'd *Lithontripticks*, and passes for a powerful *Carminative*, given in *Roliff-Water*, to a Scruple, or in White-Wine, against the *Stone* or *Gravel*, early in the Morning; it may be likewise administer'd in *Wind-Cholicks* at Bed-time in *Aniseed*, *Fennel*, or *Rue-Water*, and some add to it a Scruple of Salt of *Worm-wood*.

The Leaves of this Plant are something like those of *Fennel*, the Root long, of the Thickness of a Finger, furnish'd with Fibres, and tasting like a *Parfnip*: It grows in stony and mountainous Places; the Seed is brought over dry from *Candia*, and other hot Countries; that which is new, clean, well-tasted, and odoriferous, is the best; it affords a great deal of Oil and volatile Salt.

Both the common *Wild-Carrot* and that of *Crete*, have one and the same Virtues; but that of *Crete* is much the strongest. They expel Wind, and are good against Pains of the Womb and Bowels, vehement Cholicks, Vapours and Hysterick Fits; as also against old Coughs, Cold,

Wheezings, Asthma's, Disury, and all Sorts of Obstructions of Urine, as Sand, Gravel, Stone, and tartarous Mucilage in the Reins, Ureters, and Bladder; they are us'd in Powder, from a Scruple to a Dram, or more, in Decoctions, in Tinctures with the Spirits. Dose from a Dram to three or four. An oily Tincture is made from them with Oil of *Turpentine*, against Cramps, Convulsions, Palsies, Pains and Aches from Cold.

[This is the Seed of a *Myrrhis*, call'd *Daucus Creticus* by the old Authors, and by the later, *Myrrhis Annua Semine striato villosa incano*. Tourn. 1 Inst. 315. *Myrrhis tenuifolia annua cretica Semine albo pubescente*. Hist. Ox. 3. 302. The Leaves of this Plant are finely divided, and hairy, the Stalks slender, a Foot high; the Flowers white, standing in Umbells. The Seed is accounted a good Alexipharmic, and is an Ingredient in the *Venice Treacle* and *Mithridate*.]

8. Of *Carui*, or Caraways:

Pomet. *Carui*, which the *Latins* call *Carum*, and the *Greeks*, *Caron*, is a Plant that approaches near to the *Wild-Parfnip*; the Leaves are large, indented and divided into many small Parts, among which are several Stalks about a Foot high, on the Tops of which grow Bunches, cover'd at first with white Flowers, which are afterwards turn'd into Seed, much like that of *Garden-Parfnip*, but that this is of a darker Colour, flatter, and of a more biting and piquant Taste.

This Plant grows in most Gardens, but as the hot Countries are most agreeable and productive of Aromatick Plants, the *Caraways* that the People of *Paris* buy out of the Shops, are those brought from *Provence* and *Languedoc*.

We ought to chuse this Seed well fed, fresh, greenish, of a warm acrid Taste, and aromatick Smell, and such as has an agreeable Flavour when held in the Mouth. It is esteem'd proper to make the Breath sweet, and very good to promote Digestion, to allay or expel Wind, to strengthen the Stomach, and provoke Urine. The *Germans* have such a Regard for it, that they put it whole into their Pye-Crust, mix it in their Bread, and in a great Measure in all their Sauces. Several Persons use the Leaves as a Pot Herb.

The Root is long, fleshy, pretty thick, white, sometimes yellowish, but rarely, and of a *Parfnip* Taste. This Plant grows in the fattest Land in the Gardens, but prospers much the best in warm Soils; therefore contains in it a good deal of volatile Salt and Oil: It is incisive, aperitive, carminative, moderately binding,

binding, comforts the Stomach, helps Digestion, stops Vomiting, and operates much like *Anniseed*. *Caraways* are good against all cold Disaffections of Stomach, Bowels or Head, Falling-sickness, and the most inveterate Cholick; strengthen the Womb, and quicken the Eye-sight. They are us'd in *Caraway* by a Wind, &c. in Powder to provoke Urine, and in the *Caraway* Oil to all the Irregularities of the Liver; besides which they are very serviceable to bring away both Birth and After-Birth. Dose from 12 to 16 Drops of the Chymical Oil.

[This is the Seed of the *Garden* *vulgaris*. Park. 910. *Cuminum Pratense*, *Carui officinarum*. C. B. P. 158. a Plant of about two Feet high, the Root is large and white, the Stalks striated and jointed, the Flowers in Umbells white and five leav'd. It is common in Germany; and I have seen it in some Meadows in England. The Seed is an Ingredient in many of our Compositions. It may be taken in Substance from half a Dram to a Dram in any Liquor, or in the Distill'd Oil from three Drops to ten.]

10. Of Saxifrage.

Pomet. *Saxifrage* is a Plant so like *Thyme*, that it is difficult to distinguish them.

This grows plentifully in *Dauphiné*, *Provence*, and *Languedoc*, among Stones and upon Rocks, which has occasion'd the Name of *Saxifrage* to be given to it, as also to many other Plants that grow in the like Places, as it signifies *Break-Stone*.

You must chuse the newest Seed you can get, which is of a warm piquant Taste and an agreeable Smell; the Virtue of breaking the Stone is attributed to it, given in Powder in a Morning early, in a Glas of the distill'd Water from the Plant, or any other *Diuretick* Water. Dose half a Dram.

There are a great many other Kinds of *Saxifrage*, which several Authors take Notice of; but as this Seed is that which is commonly in Use among us, and which is generally sold in the Shops, I shall speak no farther concerning the rest, which are treated of in many other Books, and particularly by *DeCadeus* and *DeLobach*, who have written of them at large. Some will needs have it that all Plants which grow among Stones and Rocks are to be call'd *Saxifrage*.

Saxifrage, in Latin, *Saxifraga*, is *Lemery*. a Plant whose Leaves are almost round, indented on the Sides, being something like *Ground-Ivy*, but a little thicker and whiter, and on the hinder Part a little longer and smaller. The Stalks are about a Foot high, bearing on

their Tops little Flowers of five Leaves, dispos'd like a Rose, of a white Colour. When the Flower is off, it produces a Fruit almost round, which contains in two Partitions a very small Sort of Seed. The Root has abundance of Fibres, the Tops are surrounded with little Tubercles, about the Size of *Coriander-Seed*, or something bigger, of a Colour partly red and purple, and partly white, with a bitterish Taste; these Tubercles are commonly call'd *Saxifrage-Seed*. This Plant grows in Places where Herbs are not propagated, as upon the Mountains, and in the Valleys; it flourishes in the Month of *May*, and is a little viscous. The Leaves are larger, and the Stalks grow higher in some Places than others, but they are generally small, allowing a good deal of essential Oil and Salt.

It is very aperitive, proper in Stone and Gravel, and to open Obstructions, to provoke Urine and Women's Courses, cut the tartarous Mucilage, and expel it; and is chiefly us'd in Powder, from half a Dram to two Drams, or in an Infusion with White or Rhenish Wine.

[The Difference between the Descriptions given by these two Authors, might create Confusion; but it is to be observ'd, that they mean two separate Plants, both of which are call'd *Saxifraga*, and both have been us'd in Physick: The Plant describ'd by *Pomet* is the *Saxifraga Antiquorum*. Off. Dale. 231. *Saxifraga magna Mathioli*. Ger. Em. 605. That by *Lemery*, the *Saxifraga Alba vulgaris*. Park. 424. *Saxifraga Rotundifolia alba*. C. B. Pin. 309. and as this is order'd to be us'd in the College Catalogue, I have taken away the Figure before given by *Pomet*, and given one of this Plant.]

10. Of Cummin.

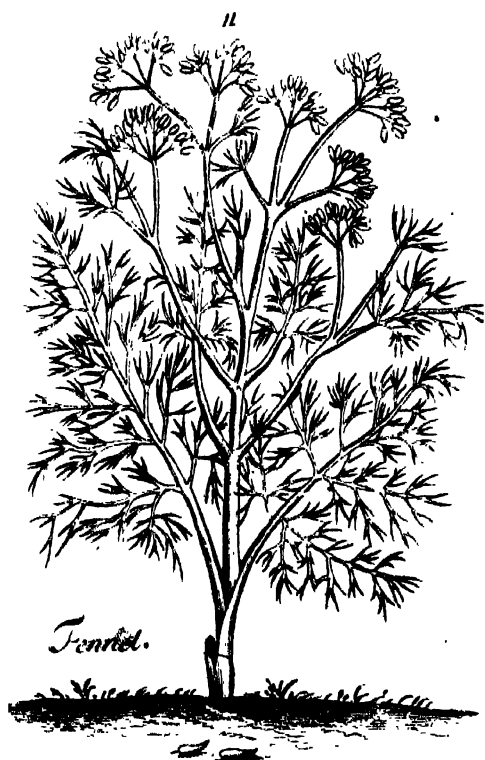
Cummin is the Seed of a Plant which is like *Fennel*, and grows plentifully *Pomet*, in the Isle of *Malta*, where they sow it as they do Corn here. In the Choice of it take that which is new, well fed, greenish, of a strong disagreeable Smell. Observe that it be not full of Holes or Worm-eaten, which it is very subject to be, which may be easily discover'd by the Eye, and by its being full of Dust; and more certainly by the taking up a handful of it from the rest; for the Seeds will be seen to be fasten'd together, and hang one from another by little Filaments, which are the Fibres of the Seed. Some use this Seed for Dropical Tympanies, because it is carminative: There is a great deal us'd to refresh and invigorate Horses, Oxen, and other domestick Cattle: They make an Oil of it by Expression, as of *Anniseed*, which is very good for the



Lurijage



(*summir*.)



Fennel.



Sea-

Fennel.

the Rheumatism, tho' it yields but little in Quantity.

Many Persons make use of *Cummin-Seed* to replenish their Dove-Houses, because Pigeons are very dainty in their Feed, tho' it is not us'd just as we sell it in the Shops; but incorporated with a little Salt and Earth, such as the Pigeons are apt to pick up in the Fields, or else Loam, moisten'd with Urine, or the Brine of pickled Cod-Fish, or other like Matters, inasmuch that in some Places People are forbid to sell it.

Cummin, Cuminum, or Cyminum, is a *Lemery*. Sort of *Caraway*, which bears a Stem about a Foot high, divided into several Branches; the Leaves are cut small, like those of *Fennel*, but a great deal less, rang'd by Pairs lengthways on the Sides. The Flowers grow in Umbels on the Tops of the thick Branches, of a white Colour; after them come the Seed, join'd by two and two, oblong and furrow'd as the *Fennel* but less, and pointed or sharp at both Ends.

The Root is small and longish, and perishes when the Seed is gone: They call this Seed in *Malta* *Amis-Acre*, or *Amis-Acre*, or *Amis-Acre*, or sharp *Amisfeed*, or sharp *Cumminfeed* to distinguish it from the same *Amisfeed* that is cultivated there, and call'd by the Name of *Sweet Amisfeed*, or *Sweet Cummin* by the *Maltois*; which Circumstance makes several Botanists equivocate, who believe this to be the same Sort of *Cummin* with the sweet Seed. This contains a great deal of volatile Salt, and essential Oil: It is digestive, dissolving, attenuating, carminative, expels Wind, cures the Cholick, eases Pain, is profitable against Diseases of the Nerves: The Chymical Oil is good against all Obstructions of Urine, Stone, Gravel, &c.

[This is the Seed of the *Cuminum semine longiore*. C. B. P. 146. *Cuminum sativum* *Dioscoridis*. Ger. 907. It is one of the four greater hot Seeds: It gives Name to the *Emplastrum de Cymino*, and is a good Ingredient in many other Compositions.]

11. Of Fennel.

THIS is the Seed of a Plant which is known throughout the whole *Pomet*. World, and therefore needs no Description: I shall content myself to say, that the *Fennel* which we now sell, is brought from *Languedoc* about *Nismes*, where that Plant is cultivated with great Care, by reason of the great Quantity of the Seed which is carried into *France*, and chiefly to *Paris*.

Make Choice of the newest Seed, longish, of

a green Cast, sweet Taste, luscious and agreeable, and which is freest from Mixture.

This is of Use in Physick, to expel Wind, for which it may be us'd instead of *Amisfeed*; but it is much more us'd by the Confectioners, who cover the Seeds with Sugar, and distinguish them afterwards by Numbers according to the Quantity of Sugar they have on them. They take the Clusters of the green *Fennel*, which when cover'd with Sugar, they sell to make the Breath sweet, for the Green is reckon'd to be of the greatest Virtue. The Apothecaries make a distill'd Water from the green *Fennel* fresh gather'd, which is esteem'd excellent for taking away Inflammations of the Eyes; and they make after the same Manner a white Oil of a strong aromack Smell; but it yields so small a Quantity, that it is not worth the Trouble to make it. The Dryness of *Fennel* Seed makes it so, that it is very troublesome to make a green Oil by Expression, as is done of *Amisfeed*. There are some who lay this Seed among their Olives, to give the Oil that comes from thence a fine Taste.

There is yet another Sort of *Fennel* which is wild, and which grows every where in the Fields, and upon Walls, without any Sowing; but the Seed of this is almost round, less, flatter, more acrid in Taste, and not so green as that we have been speaking of; it is scarce of any Use by reason of its sharp pungent Taste, and because the other *Fennel* is very common, especially since it has been cultivated in *Languedoc*; but at such Times as we had no other *Fennel* but that of *Italy*, which is call'd the *Florence Fennel*, the *Wild Fennel* was a little in Use.

There is another Kind of *Fennel*, which bears the Name of *Sea-Fennel*, which the *Latins* call *Crithmum*, or *Creta Marina*, which we pickle in Vinegar to sell in Winter with *Girkins* or little *Cucumbers*, which are preserv'd after the same Way.

Feniculum or *Fennel*, is a Plant of *Lemery*. which there are various Sorts; I shall only mention two which are used in Physick. The first is call'd *Feniculum vulgare minus acriore & nigriore semine*; or common lesser *Fennel*, with the sharp black Seed. It shoots forth a Stalk of five or six Feet high, hollow, of a brownish green Colour, fill'd with a spongy Pith. The Leaves are cut as it were into long Threads of a dark green, and agreeable Smell, a sweet and aromack Taste. On the Tops are large Clusters or Bunches, yellow and fragrant. The Flower is compos'd of five Leaves, in the Extremity terminating like the Cup of the Rose. After the Flower is gone, the Cup bears in it two oblong Seeds, swallow-tail'd, hollow on the Back, flat

on the other Side, blackish, and of a sharp Taste. The Root is as thick as a Finger or Thumb, long, striat, white, odoriferous, and of a sweet aromatick Relish.

The second Kind is call'd *Feniculum dulce*, *major* & *albo* *junius*; sweet Fennel, with the larger white Seed. It differs from the former, in that the Stalk is usually much less, the Leaves not so big, and the Seed thicker, white, sweet, and less acrid. They cultivate both Sorts in dry sandy Places. This of the latter kind, which is call'd *Sweet Fennel*, is more us'd in Physick, and is brought dry from *Languedoc*, where it is husbanded with great Care: It is the same Sort as that which is sometimes brought from *Italy*, which is call'd *Florence Fennel*. Your Choice of it ought to be the same as before directed. It yields largely essential Oil and volatile Salt; the Leaves, Branches and Root afford much Flegm, Oil, and fix'd Salt. The Leaves are good for Diseases of the Eyes, which they cleanse and strengthen; they clear the Sight, encrease Milk in Nurses, sweeten the Acrimony in the Guts, and fortify the Stomach. The Root is aperitive, and used to purify the Blood, as one of the five opening Roots. The Seed is carminative, proper to expel Wind, to assist Digestion, ease old Coughs, open Obstructions of the Lungs, and cause free-breathing.

[It is to be observ'd that *Pomet* here speaks of the *Sweet Fennel*, not the common Kind, as might be thought from the Beginning of the Chapter; but his Description of the Seed, as well as its Place of Growth and Uses, make it plain afterwards, that it is the *Sweet Fennel-Seed* he is speaking of. The common *Fennel-Seed* is the Seed of that so frequent in our Gardens; the *Sweet* is that of the *Feniculum Dulce* of *Gerard*, &c. And the wild Kind, mention'd by *Pomet*, is the *Feniculum sylvestre perenne* *Perula Folio braviari*. *Tour. i* Inst. 311. The Root of the common *Fennel* is one of the five opening Roots, and its Seed one of the greater Carminative Seeds.]

12. Of Aniseed.

Aniseed comes from a Plant that we know as well as *Fennel*, as *Pomet*. there is hardly a Garden without it; but that which is sold in the Shops, comes from several different Places, as *Malta*, *Alicant*, &c. because it is abundantly sweeter, larger, and of a more fragrant and aromatick Taste and Smell, and less green than that which is produced in *France*.

Make choice of *Aniseed* that is of the same Year's Growth, large, clean, of a good Smell, and piquant Taste, and beware of that which

is any thing bitterish, which you can't distinguish but by your Taste.

The Use of the *Green Aniseed* is too common to admit of a long Discourse; and the more, because there are few Persons who do not understand that it is proper to expel and allay Wind, and that it is a Collector of Salts. The Confectioners make use of great Quantities of the dried Seed, which they cover with Sugar for Confects.

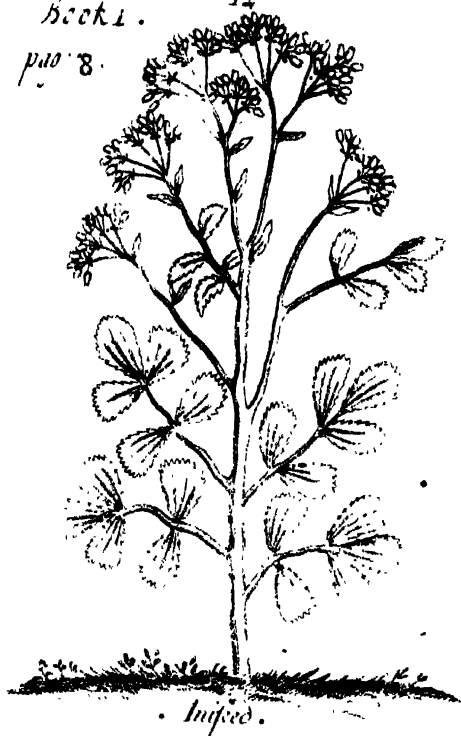
They draw from the Seed by Distillation, a Water, and a white Oil, which upon the least Cold congeals, and liquifies or flows again upon the smallest Heat; this has a strong penetrating Scent, and abounds with a great many Virtues; but its strong Smell makes it but seldom used; the Apothecaries and Perfumers use it frequently in their *Pomatum*, instead of the Seed, as well to maintain the Colour, as to save Charges; for half an Ounce of the Oil will do more Service every Way than two Pounds of the Seed.

The Perfumers keep it by them to scent their Paste, and to mix among a Variety of other Aromatics, which is what we properly call a *Medley*. Some People use this Oil, but very improperly, to make their *Aniseed-Water*, and the like. This Oil has a great many Virtues, and is an excellent Remedy to ease or allay the Gripes, especially in Infants, by rubbing the Navel therewith, or putting a small Drop or two among their Food. In a Word, it has all the same Virtues, and may be used to the same Intention with the Seed. There is likewise a green Oil drawn by Expression, of a strong Smell, and which has the same Virtues with the white, with this Difference, that it is not so powerful, because a great deal more in Quantity is drawn this Way; but it is not so pure, as *Mr. Charas* observes in his *Royal Dispensatory*, to whom we are indebted for this Invention.

In regard to the white Oil, we have it from *Holland*, partly because it costs less, and partly because it is whiter, clearer, and more fragrant than what is made here; whether this be purely from the Seed, or that they add something unknown to us by way of Menstruum, I do not pretend to say, but there may be People found here who can make it as good as in *Holland*; but I am satisfied it could not be made for the Price it is bought for. In regard to the Choice of it, it ought to be, as has already been observ'd, white, clear, and transparent, of a strong Smell, easily congealing by a little Cold, and melting by a little Heat, and such as when dropp'd on Water, swims like *Olive Oil*, and this Oil is call'd Essence, or Quintessence of *Aniseed*. The Water that is drawn off in making the Oil, is useful on the same

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12



Injico.

of Seeds.

Plate 4.



Grinder.

13



Nacen.

15



Collyflower.

same Occasions as the Oil itself, but requires to be given in a much larger Dose.

Anisum, in *English Aniseed*, is a very *Lemery*. common Plant in our Gardens; the

Stem or Stalk is about three Feet high, round, hairy, hollow, and full of Branches; the Leaves are long, cut deep, whitish, odoriferous, and something like those of *Parsley*; the Tops bear large Bunches, supplied with little white Flowers, much resembling those of *Burnet Saxifrage*: It has a little Seed, of a greenish grey Colour, scented, and sweet in Taste, with a pretty agreeable Acrimony. The Root is small, and this Plant is cultivated in fat Land: The Seed is only used in Physick: The largest and best is brought from *Malta* and *Alicant*; it is much browner than that of *France*, because it is a great deal drier.

This Seed yields a great deal of essential Oil and volatile Salt: It is cordial, stomachick, pectoral, carminative, digestive, produces Milk in Nurses, and gives Ease in the Cholick; it provokes Urine, warms the Breast, opens Obstructions of the Lungs, is prevalent against Coughs, Hoarseness, and Shortness of Breath. This Seed is used to make common *Aqua Vita*, with *Irish Ussubough*, *Daffy's Elixir Salutis*, and in the *Laxative Eleuary*, or Confection with Sugar and *Anomum*, wherein the Seeds are steep'd in Liquors, in which *Scammony* is dissolv'd, and sometimes in an Infusion of *Crocus Metallorum*. One Pound of *Aniseed* will yield about an Ounce of chymical Oil by Distillation, two or three Drops of which are specific in windy Cases, Gripes in Infants, to take away Pains and Noise in the Ears; outwardly the Stomach or Naval may be anointed therewith, and it may be dropp'd into the Ears, mix'd with a little Oil of bitter Almonds.

Le Febvre is of Opinion, these Seeds ought to be distill'd, being green, without any previous Digestion or Putrefaction, because this kind of Seed (saith he) abounds much with volatile Salt, of a middle Nature, so that the Water will not attract it to itself by length of Digestion; which will happen otherwise, if the Distillation be begun immediately after the Seed and Water are mix'd together. 'Tis true, saith he, that if Digestion precedes, the Water will be all spirituous, and of much more Efficacy than without, but without Digestion the Seed will yield much more essential Oil.

[This is the Seed of the *Anisum vulgatus minus annuum*. Hist. Ox. 3. 297. *Apium Anisum Dicum semine suave olente*. Tourn. Inst. 305. The Plant flowers in July, and the Seed is ripe in August, the Root dying every Year, after it has

perfected the Seed. The Seed is one of the four greater hot Seeds, and is an Ingredient in many of our Compositions.]

13. Of Coriander.

Coriander is the Seed of a Plant which is very common amongst us, *Pomet.* and which grows plentifully about *Paris*, especially at *Auberville*, from whence all that we sell in the Shops is brought to us.

We ought to chuse such Seed as is new or fresh, fair, dry, well fed, the largest and cleanest we can get: Care must be taken that it be kept in a Place well secured against Rats and Mice, both those Creatures being very fond of it. It is but little used in Physick, but the Brewers employ it considerably, especially in *Holland*, and in some Parts of *England*, to give their strong Beer a good Relish. The Confectioners, after they have prepar'd the Seeds with Vinegar, cover them over with Sugar, which they call *Coriander-Confects*.

There are three Kinds of *Coriander*, the Greater, the Less, and the Wild; *Lemery*. but the Seed of the first is only used, being brought to us out of the *Streights*; the first, which is call'd *Coriandrum majus*, or *Coriandrum vulgare*, bears a Stalk about a Foot and a half, or two Feet high, round, slender, and full of Pith: The lower Leaves are like those of *Parsley*, but those which put forth towards the Top of the Stalk, are much less, and abundantly more cut in; the Flowers are small, dispos'd in Bunches or Clusters on the Tops of the Branches, of a whitish Flesh-colour; each Flower is compos'd of five Leaves; when the Flower drops off, the Cup bears a Fruit made up of two round hollow Seeds: The Root is small, strait, single, furnish'd with Fibres, and the whole Plant (except the Seed) has a very disagreeable Smell like that of a Bug.

The second Kind of *Coriander*, is call'd the *Coriandrum Inodorum*, or *Coriandrum minus odorum*, the less-smelling *Coriander*. This differs from the other Sort mention'd before, by reason it is much less, and its Branches more crooked. The Smell is nothing near so great, and the Fruit is compos'd each of two Balls, which in some Measure look like small Testicles.

Both this and the former Kind are propagated in our Gardens, but we only preserve the Seed for Physick Uses, which has the Virtue of the Plant, and is used in Confects, pleasant Liquors, and stout Beer. The greatest Part of the *Coriander-Seed* now in Use comes from *Auberville* and other Places about *Paris*: It produces a good deal

of essential Oil and Salt, corroborates the Stomach, helps Digestion, makes the Breath sweet, corrects Wind and flatulent Vapours, closes the Mouth of the Stomach, and resists Infection.

[The three Kinds of *Coriander* mention'd by Botanical Authors are the *Coriandrum majus*. C. B. P. 158. The *Coriandrum minus, odorum*. L. B. And the *Coriandrum Sylvestre*, of the same Author; but the last is now found to be only a Variety of the former Plant: the first Species produces the Seeds we use, and they are ripe in July and August. They are an Ingredient in the *Lemitive Electuary*, and some other Compositions.]

14. Of Navew, Bunias, or Napus.

THIS *Bunias* or *Navewseed* is the Seed *Romet.* of a Kind of *Wild-Turnep*, which grows frequently amongst Corn. The *Wild Navew* has generally a Number of Branches; the Flowers are yellow, except in here and there a Plant, which has them mix'd with white: The Leaves of all the Species are very near alike, only larger or smaller, according to the Fertility or Barrenness of the Soil that produces them. They likewise produce their Seed alike, in Husks of an Inch or an Inch and an half long, more or less so, according to the Size of the Seed which they bear. As for the *Bunias*, or *Sweet Navew*, the Seeds of which we sell, they are twice as large as those of the other Sort, because the Seed is bigger. This Seed is round, of a purplish Colour, acid and biting to the Taste, and in all other Things comes near to the common Turnep, excepting only its Alexipharmack Virtue, which is peculiar to it. The Species of this Plant, which grows plentifully almost every where, has a yellow Seed, which is less by half than the *Bunias* or *Sweet-Navew*, yet they are taken for one another. The chief Use of this Seed is for the Venice Treacle, which hardly makes it worth a Druggist's while to keep any Quantity of it. You ought to buy it of People you can depend upon, and always be careful that you have not the common *Turnep-Seed* impos'd on you for it. Some Persons assure me, that the true *Wild-Navew* is the *Briony*.

But M. *Tournefort* condemns those who call *Briony-Seed* by that Name, and use it as such.

The *Napus*, *Bunias*, or in *French*, *Lemery.* *Navet*, scarcely differs any Thing from the Turnep, but by a certain Bearing which the Gardeners and Labourers distinguish it by, and by the Figure of the Root, which all the World knows. There are two Kinds of it, the one cultivated and the other wild; the first is call'd *Napus* by *J. B.* and *Ray*; *Napus sativa*

by *Tournefort*; and *Bunias* or *Napus* by *Ad. Lob. Ger.* The Stalk rises about a Foot and a half; or two Feet high, and spreads itself into Branches: The Leaves are oblong, deeply cut, rough and green: The Flowers are compos'd of four yellow Leaves, form'd like a Cross, which are succeeded by a long Pod of about an Inch, divided into two Apartments fill'd with Seed, thick and round, of a reddish, or something purplish Colour, sharp and biting in Taste: The Root is oblong, round, thicker at the Top, fleshy, and much less towards the Bottom, of a white or yellowish Colour, sometimes blackish on the outside, and white within, of a sweetish Taste, and agreeably piquant: It is cultivated in moist Grounds for the Kitchen.

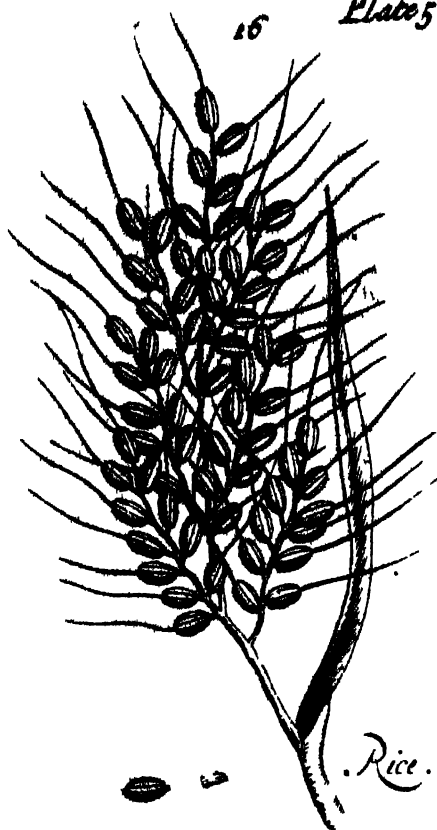
The second Kind is call'd *Napus Sylvestris* by *Tournefort*, and the *Baubins*, *Bunias sive Napus Sylvestris nostras*, *Paik.* *Bunium* and *Napus Sylvestris* *Ad.* *Bunias Sylvestris Lobelii*, *Ger.* in *French*, *Wild-Navew*. It resembles the cultivated *Navew*, except the Root, that is much less: The Flower is yellow, and sometimes white: It grows among the Corn: The Seed is prefer'd in Physick to that of the domestick *Navew*: Both one and the other Sort yields a great deal of Flegm, Salt, and essential Oil.

The *Navew-Seed* is deterfive, aperitive, digestive, incisive; it resists Poyson, and carries off the peccant Humours by Perspiration; it provokes Urine, is proper in the Jaundice, in malignant Fevers, Small Pox, and is employed in making of Treacle. The Root is excellent for inveterate Coughs, Asthma's, and Phthisick, taken hot by Way of Decoction, and is externally applied to digest, resolve, or allay Pains, apply'd in Form of a Poultice. The Seed, which is call'd *Navette*, is none of the *Navew-Seed*, as a great many believe, but is the Seed of a Kind of wild *Colly-Flower*, which they call in *Flanders* *Colsa*, or *Rape-Seed*, cultivated in *Normandy*, *Britanny*, *Holland* and *Flanders*. They make of this Seed, by Expressing, an Oil, which they call *Oil of Navette*: The Colour is yellow, the Smell not offensive, and the Taste is sweet. It is commonly used for Burns, and serves the *Cap-makers*.

[The *Bunias* order'd to be used in the Shops is the *Napus Dulcis*. *Napus Sativa*. C. B. Pin. 95. *Bunias*. Ger. 185. The Seeds are blackish, and of a biting Taste. And the Seeds of the *Napus Sylvestris*. C. B. Pin. 85. *Bunias Sylvestris Lobelii*. Ger. 181. are what we have the Oil from, which we call *Rape-Oil*, and the *French Navette-Oil*.]

[It has been a great Controversy among the Learned, whether the Seeds of the *Napus dulcis*, or *Sylvestris*, should be used in the Venice-Treacle.

Galen



Galien differs from both *Seeds*, and orders the *Seeds* of the *Pseudo Bunium* to be used in that *Medicine*.]

15. Of Colliflower and Rape-Seed.

Pomet. **C**olliflower-Seed is a little round Seed, something like Turnep-Seed, but that it is a little larger. It is brought to us by *Italy* or *Messetia* from *Cyprus*, which is almost the only Place we know of where it produced in any Quantity. There is also some brought from *Spain*, but it is not near so good as that from *Cyprus*, and it is with much more difficulty that it grows.

The newest Seed ought to be chose, and that which is true *Colliflower*, without any Mixture, of which the *Indians* have got new Certificates and that it is the Seed, and of that Year's Growth, by reason it is of the best Consequence to the Gardener and others that sow it, to be disappointed of a whole Year's Production by the Badness of the Seed.

The *Colliflower* gives me an Opportunity of speaking of another Species, which some Authors call *Wild-Colliflower*, and which is propagated with great Industry in *Holland*, *Flanders*, *Normandy*, &c. for the sake of the Seed, which they make Oil of by Expression; and this is what is call'd *Navette-Oil*, and by the *Flemings* *Colza*, or *Rape-Oil*. This Oil is of great Use to the Woollen Manufacture in *France*, especially in the Time of War, when Whale or Train Oil is scarce and dear. The Goodness of this Oil is known to a great many Persons, whose Occasions oblige them to understand it; nevertheless I advise them to chuse such as is pure and unmix'd with other Oils, which may be easily known by the Gold-Colour and Goodness of the Scent, for the true *Rape-Oil* is sweet, and on the contrary the *Linseed* bitter.

[I have before observ'd, that it is from the Seeds of the *Napus Sylvestris* that we have this Oil, which the People of *Lincolnshire* call *Rape-Oil*, and the Seed *Cole-Seed*. I am perfectly certain of this, as I have myself seen the Oil made there.]

16. Of Rice.

Pomet. **R**ICE is the Product of a Plant which grows very common in many Places of *Europe*: It commonly grows in the Water, and, as some observe, though the Water encreases during the Time of its Growth, it still keeps its Ear above the Surface of it. That which is now sold in *Paris* is brought from *Spain*

and *Piedmont*. This a Seed of so great Use and Profit, that it may be call'd the *Manna of the Poor*, and throughout several entire Countries, they have scarce any thing else to subsist on.

Chuse the newest Rice, well cleans'd, large, that is to say, plump or well fed, white, not dusty, nor smelling rancid: Those who take notice of the Rice of *Piedmont*, esteem it much more than that of *Spain*, which is commonly reddish and of a saltish Taste. The Use of Rice, chiefly at *Paris*, is for the Lent Season, when they boil it in Water, then in Milk, and sometimes reduce it to Powder, that is to say, Flour, which they use instead of Wheat Flour, to thicken their Milk with.

To reduce Rice into Powder, pour boiling Water upon it, and then wash it with cold Water, so often 'till the Water remains clear; after this put it in a Mortar to pound, and when it is powder'd set it to dry, and then searce it fine; for it will often appear very fine when it is wet, and yet as it dries show that it is coarse and requires sifting.

It is restorative, nourishing and sweetning; it conglutinates the Humours, and is useful in Fluxes of the Belly; it purifies the Mass of Blood, and stops Hemorrhages. It is used either in Pyesans or Food.

Besides this, we sell *Pearl* or *French Barley*, which ought to be chosen new, dry, plump and well fed, white, but not blanch'd: It is prepar'd at *Charanton*, near *Paris*; but the best is that of *Vitry*. We likewise sell Rice that is brought from several Parts of the Country, but chiefly to make a Sort of Coffee of, which it tastes very like when burnt. The Poor buy what we call in *England* *Grats*, which is made from Oats, and when ground at the Mill is call'd *Oatmeal*. There is *Millet* also shell'd and pick'd, which they prepare in the Forest of *Orleans*: Besides other Pulse, as the green and yellow *Pease*, which come from *Normandy*; and the Beans of *Picardy* and other Places. There are other Things also sold in the Shops, which are made of Wheat Flour, as *Vermicelli*, both the white and yellow Sort, and *Starch*.

The *Vermicelli*, which the *Italians* invented, and call *Vermicelli*, is a Paste made out of the finest Part of the Wheat Flour and Water, which is afterwards drove through small Pipes like Syringes, to what Length or Thickness they please; so that from the Resemblance of its Figure to small Worms it is call'd *Vermicelli*. Some of this Kind of Paste they make in the Shape of Ribands, of two Fingers Breadth, and this they call *Kagne*; other Parcels of it are form'd like a Quill, and those they call *Macaroni*, and some in small Grains

like Mustard-Seed, which they call *Semoule*, the Name by which they call the fine Flour they compose it of: And finally, some in the Shape of Beads, which they call *Patrex*. They colour this Paste as they fancy, with Saffron or other Things, and sometimes make it up with the Yolk of an Egg, Sugar and Cheese. Of late Years this is made at *Paris*, and used in Soups and Broth, as in *Italy*, *Provence* and *Languedoc*.

The white *Vermicelli* ought to be new-made and as white as possible, and the Yellow of a fine golden Colour, the driest and the newest made which can be got.

Starch, which the *Latins* call *Amylum*, is made of the *Pecula* of Wheat Flour, which the Starch-makers form into Cakes and dry in an Oven, or by the Heat of the Sun. This used to be brought into *France* from *Flanders* and other Countries, but at present that which is made at *Paris* surpasses that of all other Places; and they transport from thence great Quantities into other Parts of *France*, and several neighbouring Countries.

We ought to chuse *Starch* for being white, soft and most subject to crumble, likewise such as has been dry'd in the Sun, and not in an Oven, which makes it of a greyish White: Its Use is so generally known that it needs no Description.

Rice in *English*, is call'd *Ris* in *Lemery*. *French*, and *Oryza* in *Latin*: This Plant bears its Stalk about three or four Feet high, much thicker and stronger than that of Wheat or other Corn: The Leaves are long, like the Reed, and fleshy; the Flowers blow on the Top like Barley, but the Seed which follows is disposed in Clusters, each of which is enclosed in a yellow Husk, ending in a spiral Thread. This Seed is oblong, or rather oval, and white: The Plant is cultivated in moist or low Grounds in *Italy*, and the Seed brought dry from *Piedmont*, *Spain*, and several other Places: Its chief Use is for Food, but is sometimes made use of in Physick: It nourishes well and stops Fluxes, therefore is good in Armies, Camps and Sieges, because it is slight Carriage and excellent Sustenance, and easily prepar'd: It encreases Blood and restores in Consumptions: It is made into *Fruments* by boiling in Milk, or, for want thereof, in Water; or into Cakes with Water or Milk, and so baked dry; and is excellent good in Broth, with any Kind of Flesh.

[Beside the other Uses of *Rice* there is an excellent spirituous Liquor made from it, which the People of *Peru* call *Acua*, and we, from a wrong Pronunciation of the Word, *Arrack*.]

[*Rice* is the decorticated Seed of the *Oryza*. Ger. Park. &c. It is cultivated in many Coun-

tries, and is excellent both in Food and in Medicine, in Fluxes of all Kinds.]

17. Of Fenugreek.

Fenugreek, which some call improperly *Senegrè*, and others *Bucara*, *Pomist*. or *Agoceros*, because the Pods which enclose the Seed, resemble in some Manner a Goat's Horn, is a Plant which grows in several Parts of *France*. Its Stalks are round, hollow, of a darkish Colour, the Leaves small, roundish and indented, growing three and three together, after the Nature of the *Trifol*; the Flowers small and white, which are succeeded by a large Pod, which is long and sharp, representing, as said before, a wild Goat's Horn. The Seed bears the Name of the Plant, and is the only Part of it which is sold by the Name of *Fenugreek*. This Seed ought to be fresh, of a lively yellow, towards a Gold Colour, but it becomes reddish and changes brown if long kept: It is about half as big as a Grain of Wheat, hard and solid, and is of something like a triangular Shape, but a little cut in, almost all round, near the Middle, and of a strong and very disagreeable Smell. The Farmers about *Aubervilliers* sow and cultivate this as they do *Coriander-Seed*: It is sent to *Paris*, and from thence to *Holland* and other Parts. The Ancients, and some *Germans* at this Time, make a Decoction of this Seed, and eat it as they do other Pulse, to remove and expel Wind; but I believe few or none will imitate them in this Practice, which is so disagreeable to the Nose and Palate: It is much better for Cattle, and especially Horses, to mix with their Oats to fatten them; But it is no good Nourishment for them, according to the Account of those who have experienced it.

It is principally used externally, as well in Decoctions as made into Powder and mix'd in Cataplasms that are intended as Resolvents and Emollients.

There is no farther Skill necessary in chusing *Fenugreek*, than to see that it be new, well fed, and of a good yellow Colour.

There are two Sorts of this Plant, but their Difference only consists in *Lemery*. that the second is something less than the first, but the Virtues are equal, both of them being emollient, dissolving, and anodyne; so that almost all Cataplasms for those purposes consist in a part of the Mucilage of them. They are also used in emollient Clysters, for that they blunt the Sharpness and Acrimony of the Humours, especially in the Bowels.

ook 1.
13.

of Seeds.

Plate 6.



[The Plant which produces this is the *Foeniculum officinale*. C. B. Pin. 248. Hist. Ox. 2. 266. The Stems are single, slender and hollow, the Leaves green on the upper Side, and ash-colour'd beneath. The Pods long, slender, and swelling in the middle, each containing five, six or seven Seeds. It flowers in July, and ripens the Seeds in August, and then the Root perishes. They enter into the Composition of many of the Shop Plaisters and Ointments, and it may be added to the Account now given of their Virtues, that they mitigate the Pain of the Sciatica, and disperse Tumours of the Breasts.]

18. Of Luzerne, Burgundian Hay, or Trefoil.

THIS is a Species of Trefoil, or *Pomet.* *Saintfoin*, to which some have given the Name of *Medica* or *Median Hay*, because the Greeks, after the War with Darius, carried this Seed into Greece, and gave it the Name of its native Country, which was *Media*. This is a Domestick Plant, and very common in *Languedoc*, *Provence*, and *Dauphine*, all along the Banks of the *Rhone*, and in *Normandy*, from which Places the Seed is brought to *Paris*. This is a very luxuriant Plant, and produces abundantly, especially in the warm Countries; the Branches do not run along the Ground, as in several other Trefoils, but it has a round Stalk, reasonably thick, strait, and strong, adorn'd with several Shoots; towards the Top, spring a Quantity of Leaves ranged by three and three; and it grows about the height of a Foot and a half, and sometimes two Foot. From among the Leaves a purple Violet Flower rises, like that of the Melilot, and after that the Seed: This is almost round, but a little longish, and something pointed, of a pale yellow Colour when it is new, afterwards it turns red, and almost brown when it grows old. It is something less than the Seed of the Garden Cress, and the Taste is something like it, but that it is not quite so hot.

Horses, Mules, Oxen, and other domestick Cattle, love this exceedingly, but above all when it is green. If you would permit them they would then eat of it till they burst; for which Reason the Farmers never dare give them a great deal of it at a Time. And tho' when dry it is very proper to fatten them, yet the Excess of it is always dangerous.

Parkinson calls this *Fœnum Burgundiacum*, *Lemery.* *diacum*, *from Medica legitima*, Ger. *Trifolium Burgundiacum*, in French it

is *Luzerne*, and bears it. Leaves dispos'd three and three, like Trefoil, according to *Mr. Tournefort*: Its Root is very long, woody, moderately thick and strait, and will bear the Frost: It is not only cultivated in the warm Countries, as *Languedoc* or *Provence*, &c. but in the moderate Parts, about *Paris* and in *Normandy*. This Plant delights in a fat fertile Soil; and may be mowed five or six times a Year: It is extraordinary to make Cattle fat, and Cows spring with Milk; contains a considerable Quantity of Oil, and a moderate Share of essential Salt; and is of some Service in Physick, to temper the Heat of the Blood, and other Fluids, and to provoke Urine, used as Tea, or in a Decoction with Water.

[This is the Seed of the *Medica* *hirsuta*, *medicifera*, *purpurea*, *contorta*, &c. C. B. Pin. 248. *Medica sativa*, *siliqua contorta*, *hirsuta*, &c. Hist. Ox. 3. 242. It is esteem'd Cooling and Diuretick, but never kept with us in the Shops, as heard of in Prescription.]

19. Of Agnus Castus, or the Chaste Tree.

THIS *Agnus Castus*, which some call by the Name of *Vitex*, is a Plant *Pomet.* which grows in Form of a Shrub, along by the Sides of Rivers and in Gardens; its Flowers are like those of the Olive-Tree, but that they are something longer: Its Trunk and Branches are woody, which end in several long Boughs, fine, pliable, and intermix'd with Leaves, Flowers and Fruit in its Season, which appears white at first, but becomes intensely red. Some People call these Little Seeds Small Pepper, or Wild Pepper, as well because their round Figure renders them like Pepper, as because their Taste is a little biting and aromatick.

This Plant bears the Name of the *Vitex*, because its Branches are pliable, like those of the Osier or Willow: And the Name of *Agnus Castus*, because the *Athenian* Ladies who were willing to preserve their Chastity, in the *Thesmophoria*, the Celebration of certain Rights to the Goddess *Ceres*, made their Beds of the Leaves of this Shrub, on which they lay: But it is by way of Ridicule, that the Name of *Agnus Castus* is now given to this Seed, since it is commonly made use of in the Cure of Venereal Cases, the common Consequences of People having violated their Chastity. However the Seed ought to be chosen new, large, well-fed, and such as grew in the hot Countries, which is much better than that of colder Climates.

The Seed of this Shrub is round and grey, almost like Pepper, having *Lemery.* something of the Taste and Smell,

and therefore is often called by the Name. It delights in wild uncultivated Places, near the Banks of Rivers, Ponds, and Brooks in the hot Countries, where it prospers best, and from whence the Seed ought to be chose, as much better than what grows in the Northern Parts: Take that which is fresh, large, and well fed; it is hot, attenuating, and Viscous, provokes to Urine, and excites the Monthly Courses; it softens the Hardness of the Spleen, expels Wind, and may be given in Powder, or a Decoction; and is likewise used externally by way of Poultice, &c.

[This is the Seed of the *Vitis* *five* *Agnus* *Cystitis*. Ger. 1201. *Vitis* *foliis* *angustioribus* *ramulis* *nudo* *diffusis*. C. B. P. 475. It is common in Italy, Sicily, &c. the Leaves are very beautifully divided as it were into Fingers of a Hand, the Flower white, the Fruit round and naked. It flowers in August: Authors do not seem well agreed about its Virtues. It has been however a Medicine in great Esteem, and a principal Ingredient in many Compositions, but is now grown quite out of Use.]

20. Of the Wild Cherry, call'd Mahaleb.

THIS Fruit, which some have named *Pomet.* *Mahaleb*, is the Kernel of a small Berry, almost like a Cherry-stone, which grows upon a kind of a Shrub, which some Authors believe to be a kind of a *Phyllirea*. The Leaves are large, ending in a Point, and something resembling those of the Cherry-tree, among which the Fruit arises, covered with a small green Coat, extremely thin.

This is brought to us from several Parts, but especially *England*; and the best Choice to be made of it, is, by taking the freshest, largest, and that which is least fill'd with little Shells, and taking Care that it has no ill Smell; for there is some of it that smells so strongly, like Bugs, that it is hardly to be used. The Use of them is for the Perfumers, who, after they have broke 'em, mix them with common Water, Rose, or other distill'd Water, to wash their Soap with, in order to make Wash-balls.

Mr. *Tournefort* calls this *Mahaleb* *Cerasus sylvestris amara*: By others, it is called *Phamacerasus*, and *Vaccinium Plinii*. It is a kind of Wild Cherry, or a small Tree almost like the common Cherry: The Wood is of a greyish Cast, inclinable to red, agreeable to the Eye, firm, and of a sweet Flavour, covered with a brown, or a blackish blue Bark: The Leaves are like the black *Poplar*, but much less: The Flowers resemble the ordinary Cherry, white, and each composed of five Leaves,

in Form of a Rose, of a good Smell. When the Flower falls, the Fruit succeeds, which is round, black, and of the same Shape with the Cherry, containing a Nut, or Stone in it, which yields a Kernel like the bitter Almond. Some People call this Fruit *Vaccinium*, and pretend it is that which *Virgil* speaks of in this Verse

Alba *frustra* *cadunt*, *Vaccinia* *nigra* *leguntur*

The Root is long, thick, and spreads itself into a great many Branches: The Fruit yields a good deal of Oil and volatile Salt: It attenuates, is emollient, sudorifick, and drying. The Use of it is for external Application, but is little in Practice. [The Tree which produces these is the Rock Cherry, the *Macaleb Gesneri* Ger. 1211. *Cerasus sylvestris Amara Mahaleb putata*. J. B. 1. 227. It grows in stony Places, on Mountains, and flowers in May.]

21. Of the Avignon, or French Berry for dying, call'd Box-Thorn.

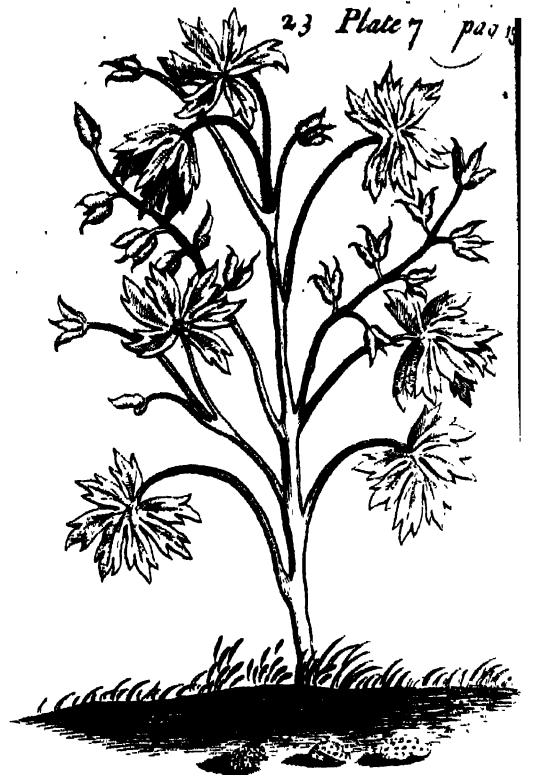
THE *Avignon*, which some call the *Yellow Berry*, is the Fruit of a *Pomet.* Shrub which Authors call *Lycium* from *Lycia*, where it grows plentifully, as it does likewise in *Cappadocia*: And it is sometimes call'd *Pyracantha*.

The Shrub which bears this Berry, grows in large Quantities about *Avignon*, and all the stony Places in the Country of *Venaissin*, and likewise in several Parts of *Dauphiny*, *Provence* and *Languedoc*. 'Tis a thorny Shrub, whose Branches are about two or three Foot long, the Bark grey, and the Root yellow and woody, the Leaves small, thick and disposed like those of the Myrtle, but of the Size of the Box; the Berry is about the Bigness of a Wheat Grain, sometimes consisting of three, sometimes of four Angles, and sometimes made into the Form of a Heart. The Colour is green, turning towards a yellow, of an astringent and very bitter Taste.

The Use of it is chiefly for the Dyers to stain a yellow Colour with: But the *Dutch* boil this in Water with *Roman* or *English* Allum, and the white Chalk they adulterate the Cerus with, and make it into a Kind of Paste which they form into twisted Cakes, and when they are dry send them into other Countries under the Name of *Stil de Grain*; which to have its requisite Qualities ought to be of a golden yellow, tender, friable, and with as little Dirt in it as possible. It is used for Painting in Oil Colours and Miniature.



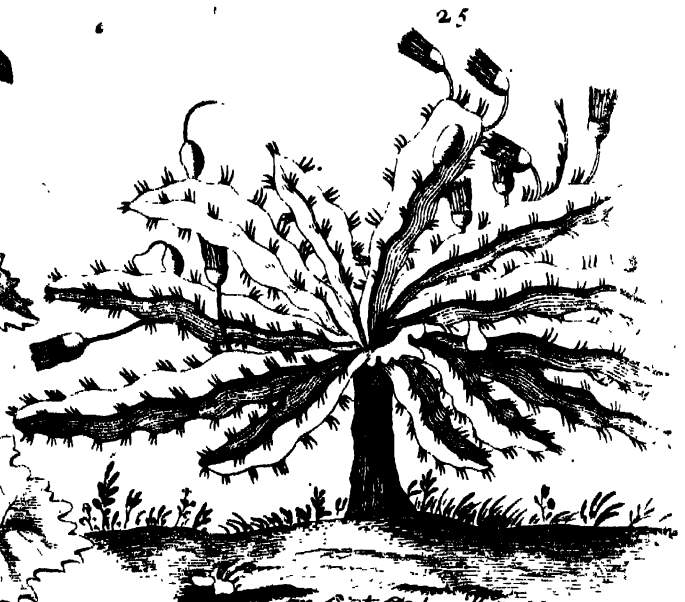
Myrtle of y^e Shops.



Staves-acre.



Hock Seed.



Mesquite Cochenille.

By some this is call'd *Lycium Buxifolia*, by others, *Lycium Album*, and *Pancanthe*, or the yellow Berry; it is always transposed dry, for the Use of the Dyers, who ought to have the freshest, largest, and best dried. All the Parts of this Plant are astringent, acerb, and resolving. *Diiscorides* recommends an Extract made of the Roots and Branches of this which he calls *Caps* or *Lycium*: He assigns to this an astringent detensive Quality, proper to dry up a cleaving, or watering of the Eyes, to suck up, and draw away Cataracts, for curing Ulcers of the Throat, for the Bloody-flux and Hemorrhages, whether internally, or externally applied.

[These are the Fruits of the *Lycium fructu Pyracantha*. Ger. 1512. *Lycium Buxifolia rotundifolia* *Lyricum velutifolium*. Bryn Prod. 2. 64. It is common in the hot Countries. What we once used in Physick was a Juice or inspissated Juice from the Leaves and Branches which *Diiscorides* gives the Method of making; but this while in use was generally adulterated, or made from the Berries of the Woodbine, Privet, Sloe, or some other Shrub: It is now grown wholly out of Use.]

OF MYRTLE BERRIES.

THE Myrtle Berries are Seeds of certain Shrubs call'd *Myrtles*, which Authors have divided into several kinds, but I shall confine myself to two sorts, which are commonly known and cultivated about *Paris*; the one is the Male, and the other the Female: The first is much larger and thicker, and the Leaves of a pale Green, terminating in a point, smooth, fragrant, and three or four Times as big as those of the Female Myrtle, whose Leaves are of a dark green, and known by their being rang'd very near one another; besides, the Smell is much stronger and finer than that of the Male, and the Branches more yielding: The Flowers of both kinds are rose-fashioned, of a white Colour, tending a little to red, and arising directly in the middle betwixt two Leaves, to which the Berries afterwards succeed, which at first are green, but grow insensibly black, juicy, smooth, and are filled with a white Seed, enclosed in a Coat.

These Berries are made use of internally and externally. The *Arabians* make a Syrup and Oil from them, but they are chiefly used to dye. The *Germans* dye Blue with them, as the *French* Berry is used for yellow; but the *Italians* employ the Myrtle Leaves and Branches to the same, as they do the *Savoyards* for coupling their Leather, Skins, &c. The Berries which are now sold

are of a black Colour, first well dried in the Sun, and then kept carefully for Use.

The *Myrtle* is a small Tree or Shrub *Laurus*, that is always green and fragrant, of which there are a great many sorts which are known by the Size of the Leaf, and the Colour of the Flower. *Tournesfort* says, that when the Flowers grow, the Berry comes in the Cup, of an oblong oval Form, representing a sort of a Crown when the Mouth of the Cup is turned downwards. The Plant is cultivated in our Gardens and Green-houses here, but is an Inhabitant of the hot Countries, where the Smell is much increased, and it yields a great deal of sweet Oil, Sperm, and some small Salt. The Leaves and Flowers have an astringent Quality, and are used for cleaning the Skin, for contracting the Flesh, throbbing the Fibres, &c. from thence a Water is made for the Ladies to wash with. The Berries have a binding detensive Power, and the chymical Oil from thence is excellent for the Hair, and used in Pomatums, and most other external Medicines of the Face and Skin.

[These are the Berries of the *Myrtus batica Sylvestris*. Ger. Em. 1412. *Myrtus carminis Sylvestris*. C. B. Pin. 468. They have been frequently subject to be adulterated with the Berries of the *Vitis Idæa Angulosa* J. B. Which as *Burbaum* observes have thence got the Name of *Myrtilli*. They are resinous and astringent, are not much in Use inwardly, but are in the Composition of several of the strengthening Plaisters.]

23. Of Stavifacra.

THIS is the Seed of a Plant which grows commonly in many Parts of *Proter*. *Provence* and *Longuepie*. The Leaves of the *Stavifacra* are large and green, deeply indented and thick; the Flowers are of a Sky-blue, and grows in a Husk, which afterwards contains the Seed, and is of a blackish Colour at Top, very rough on the outside, and of a whitish yellow within; the Taste being bitter and very disagreeable. Chuse such Seed as is new, clean, and come off of green Ground. The Use of it is chiefly to destroy Vermin, especially those of Children, to raise Blisters, or allay the Anguish of the Tooth-ach, when it has been boil'd in Vinegar. It is also used to cleanse, and consume proud Flesh in old Ulcers; but it is a dangerous Thing to tamper with, and I wou'd advise such as don't thoroughly understand it, to let it alone, as there is great Hazard attending the using it; and there are other Remedies enough to do the same good, without the Danger.

It is call'd *Staphisagria*, *Herba Pitti-Lemery*. *cultriv*, by Mr. *Turnefort*, *Delphinium Platensis*, *Staphis agria dictum*, or in *English* Loufe-Herb. It raises its Stalk about a Foot and a half, or two Foot high, upright, round and leafless. Mr. *Turnefort* says, the Flowers are composed of many unequal Leaves, and follow'd by a kind of rough three-corner'd Seed. If taken inwardly, which is but seldom, it purge and vomits, and is used in its Powder, tho' rarely, and, As a Masticatory for the Tooth-ach. 1^{stly}, A Guarism to purge Flegm. 2^{ndly}, An Emetic to throw Flegm and Water by the Nostrils. 3^{thly}, To mix it with an Ointment with Lard to cleanse Wounds. 6^{thly}, A Mixture with Oil of Almonds, to kill Lice in Children's Heads, which is its chief Use: So also with Vinegar. It is of a churlish Nature, and not fit to take inwardly.

[The Herb which bears it, is the *Staphis agria* *Gervill*. The *Aconitum urum Ricini fere foliis*, *Staphis agria* *Staphis agria* *Plukalmag*. 357. The Seed are a strong Purge taken in the Quantity of ten, or twelve Grains, but few People care to use them; and our *Quincy* ranks them with the *Nux Vomica Cocculus Indi*, &c. and says they are all much of the same Nature.]

24. Of Amber, or Musk-Seed.

Pemet. THIS is a small Seed, of the Size of a Pin's-head, of a greyish sad brown Colour, in form of a Kidney, of a Musk or Amber Smell, especially when it is new, which gives it the Name. This Plant which grows strat is adorn'd with a green Velvet Leaf, like that of the *Martian*, whence it is call'd *Herba Indica*, which signifies *Indian Velvet*. It bears yellow Flowers in form of Bells, which are surrounded by triangular Huffs, brown on the outside, and white within, of a Finger's Length, in which the Seed is enclosed. Chuse that which is fresh, clean, dry, and of a good Smell: It contains a large Quantity of exalted Oil and volatile Sak; such as comes from *Martinica*, is abundantly more fragrant than that which grows in any other of the *Caribee* Islands. This Plant grows likewise in *Egypt*, where it is call'd Musk-seed and *Abelmusk*. The Perfumers use this all over *Italy*, and the Bead-makers in making their Beads.

This Seed is something like the *Mil-Lemery*. It is of a sweet Taste, and is brought to us from *Martinica* and *Egypt*; it comes from a kind of *Ketmia*, and is call'd by *Tournefort*, *Ketmia Egyptiaca Semine Moschato*. This Plant carries its stalk a Foot and a half

high; the Leaves are of an unequal size, but cut and indented very deep. The *Egyptians* use this internally as a Radical, to fortify the Stomach and Head, and to throw out the Lues. It gives a grateful Scent to the Air, but is not proper for the use of the Sick. The Plant which bears it is the *Herba Indica* *C. B. Plukalmag*. 357. *Aconitum urum Ricini fere foliis*. 353. Another name of the Plant which bears it is that the *Indians* make use of to kill Lice in Children's Heads, then is toxic, and is used in its Powder, and is affirmed, by *Turnefort*, to be the same as that he relates.

25.

THE Cochenille, *Coccus*, is the Seed of a Plant about two or three Feet high, adorn'd with Leaves two Fingers thick, of a beautiful Green, and very prickly; among which grow Huffs in form of a Heart, of a green, tending to a yellow Colour, in which are enclosed a Quantity of small Seeds of the size of a Pin's-head, in shape sometimes round, sometimes triangular, but always rough, of a greyish silver Colour to the Eye, and as red as Blood within. The Plant which bears them is call'd *Opuntium*.

We bring this Seed from *Peru* and other Places of *New-Spain*, as the Gulf of *Mexico*, from whence it is brought by the *Spanish Galeons*, or Plate-Fleet to *Cadix*; as *Ipecacuana*, the *Cortex*, *Sarsa Parilla*, and other Drugs are; and from thence transported to *England*, *Holland*, or *France*.

The *Mexich Cochenille* is a Thing of that prodigious Consequence to the *Spaniards*, that they would undergo any Punishment, rather than yield that it should be propagated in *France*.

There are very few Persons who believe, that this *Cochenille* is a little Animal or Insect; and I was of the same Opinion, 'till convinced of the Truth of the matter, by two Letters of the *Sieur Francis Roussier*, a native of *Angers*, dwelling at *Lagunette*, near *St. Domingo*, who writes to me thus:

"The *Cochenille*, *Moniteur*, which you are desirous to know by the Plant, grows about two or three Feet high, and is adorned with Leaves of two Fingers Thickness, of a fine green Colour, full of Thorns on all sides. The Seed is small, and contains in Huffs round like Hearts, turning to a Yellow when they grow ripe. What is brought to us, comes from all those Parts call'd the *Indes*, for the title we have about *Legonna*, is not worth speaking of."



Le Saffre Cochenille.



The Kermes Insect on the Flax.

27



The Ragin Amonum.

27



Rose of Jericho.

We may see this is quite contrary to what is reported by Monsieur de *Paratier*, who confounds the scarlet Grain, which is *Kermel*, with the *Cochenille*; and, at the End of his Discourse, observes that it is a greyish Worm, or Insect, which comes from the *Indies*, and which they traffick considerably in; so that from *Tlascala*, a City in *Mexico*, they deal for more than two hundred thousand Crowns a Year. And, after him, the Reverend Father *Plumier*, a Minime Friar, told me, the rest of September 1692, from his own Mouth, and certify'd under his Hand as follows:

"The *Cochenille*, says he, is named *Asfich*, is a small Insect like a Bug, which is found upon many different Sorts of Plants, as well in *New Spain* as the *American Isles*: These little Animals are so common in the Countries thereabout, that they make a Sort of Crop of them.

"All Kinds of Plants are not equally proper to supply these little Animals with Aliment capable to produce a thorough Redness; therefore the Inhabitants of those Parts feed their small Cattle upon the *Opuntium*, the Juice of which is red, which they feed on, and which contributes very considerably to strike the Colour deep, which the Dyers seek after; and, as the Ants delight exceedingly in these little Insects, the *Spaniards* take care to fill those Places full of Water, by Ditches, where the Plants grow, whereof we have been speaking, to prevent the Ants from going thither.

"The chief Plant on which we find the *Cochenille*, is that which the *Americans* call *Raquette*, or *Candasse*; and the Botanists *Opuntium majus spinosum fructu sanguineo*; which signifies the large *Indian* prickly Fig, whose Fruit is as red as Blood.

"This Plant is wonderful in its Kind, in this, that it is wholly compos'd of a Quantity of large, thick Leaves, which are of an oval Figure, a glorious Green, cover'd with long Thorns, very sharp, of a yellow Colour; and at the End of the Leaves grow large Flowers, of a pale Rose Complexion, follow'd by a fine red Fruit. These little Insects, of which they make the *Cochenille* brought to us, are of a Silver-grey, but of that particular Kind, that they multiply after a prodigious Manner, so that a Hundred will produce Millions."

On the 30th of *January*, 1693, the said Father *Plumier* brought me a Letter writ by himself, to this Purpose:

Father Plumier's Declaration concerning Cochenille.

"The *Cochenille*, which is brought from *New Spain*, or the Continent of *America*, is an In-

sect of the Size and Form of a Bug, which clings to several Sorts of Trees, but more particularly to the *Acacia*, or to certain Trees, which the People of the *French Islands* call *Cherry Trees*. It is a very fruitful Animal, and carries between the Thighs, and on its Breast, an infinite Number of Eggs, which are almost invisible, yet produce an innumerable Quantity of very small red Insects, which the Ants are very fond of eating. When the old ones are crush'd, they yield a red Juice inclinable to Scarlet, mixed however throughout with a little Tinge of Yellow; so that those which are bred upon the Trees, do not produce so fine and lively a Colour; But the *Indians*, to render the Juice of a beautiful Colour, breed these Insects upon certain Plants, which are call'd in *Latin Opuntium*, and which the *French* call *Raquettes*. These produce a thick Fruit, like our Figs, full of an admirable fine red Juice, of which the *Cochenilles* feed; which is the Occasion that the *Cochineals* cultivated on these Plants have a finer and higher colour'd Juice than those which live on any others. When I discover'd these Insects in the Isle of *St. Domingo*, I shew'd them to two *Indian* Slaves, that were Natives of the Country where they breed, and they assur'd me both, that these were those they made *Cochenille* of.

"Being on my Return from my Voyage to *St. Domingo*, I was desirous to set myself right about this Insect, from the Authors who have writ of *America*; and here follows what I found in the *Sieur de Laet's* Description of the *West Indies*. Book V. Chap. 3.

"The *Cochineal* Grain comes from several Provinces of *New Spain*, taken from the Tree call'd *Tuna*, which bears very thick Leaves, on which it grows in Places more expos'd to the Sun, or cover'd from the North-East Wind. It is a very little Animal, living as an Insect much like a Bug; for when it first clings to the Tree, it is less than a Flea, and comes from an Egg the Size of a Mite, call'd, in *Latin*, *Acarus*: They fill the Tree, and spread over the whole Garden, and are gather'd for Use once or twice a Year. These Plants are dispos'd in Order, as they do the Vines in a Vineyard; and the younger they are, the more plentifully they bear, and afford a better Grain; but it is necessary to preserve them from being destroy'd by other Insects, and no less from Pullen, which will eat them.

"Note, This *Tuna* is nothing else but the said *Opuntium*, of which I spoke before; there are several Sorts of it, but the Choice for cultivating *Cochineal* ought to be made of such whose Fruit produces the finest red Juice."

However, not being able to bring myself to agree to what Mr. *De Fursiere*, the Reverend Father *Plumier* and *Laet* have writ, I find myself more and more obliged to believe that *Cochineal* is the Seed or Grain of a Plant, because the *Sieur Rousseau* takes Notice to me, at the End of his first Letter, in order to justify what he says, That he would send me the Plant, which he hop'd to do, with God's Assistance: And in his second Letter, dated the 25th of May, in the same Year, he writes thus :

S I R,

" I N relation to the *Cochineal*, about which I have been speaking, I must tell you a pleasant Story, of a certain *Minime* Father, who calls himself a Botanist. He is about 45 or 50 Years old, of a blackish Complexion, whom one might naturally judge a Man of Knowledge, if he never spoke. He saw several *Acacia's*, which are very prickly or thorny Shrubs, and what they call *Cardasses*, which are a Sort of Plant that bears Leaves of two Fingers Thickness, made a little like the *Raguettes*, which produces Fruit of the Shape of a Fig, of a Taste a little acrid, and which makes the Urine red: Certain Animals that frequent these Trees, he affirm'd, were the *Cochineal*, and made a great deal of Laughter among the Inhabitants of *St. Domingo*. This lost the Credit the good Father had there, especially with Mr. *De Cussi*, who had his Share, among the rest, in the Diversion they had from what the good Father said. He departed for *France* sometime after, where I know he arriv'd with the same Error concerning *Cochineal*, that he had been in at *St. Domingo*."

The *Sieur Rousseau* inform'd me again, that he had found upon the *Acacia's*, a Species of little Creatures of the Size of a Bug, which they call'd *Vermillon*; these are a little thicker, but they are of no Use, because they cannot dry them; 'tis apparent, as we may rationally conjecture, that this was the pretended *Cochinille* of Father *Plumier*.

Besides the Letters of the *Sieur Rousseau*, there are other Things which deserve our Credit; as, that we cannot discover the Feet, Wings, Head, or any other Part of an Animal in the *Cochineal*, which we have; and that it has in it all the Marks of a true Seed. And if these Proofs are not sufficient, we may look into the Judgment of *Ximenes* and *William Piso*, in his History of the Plants of *Brasil*; where, after he has given a long Description of the Species of the Indian Fig, which is call'd *Jamacan*; he says it is the same Plant that in *New Spain* produces and bears the *Cochineal*.

We ought to make Choice of the *Mezack Cochineal*, of a good Sort; that is, such as is plump, large, well fed, clean, dry, of a Silver shining Colour on the Outside, and when it is chew'd in the Mouth, that 'tinges the Spittle of a bright red Colour; and reject that which is lean, dirty, and light; and take particular Care, lest there be small Stones among it, which is a very common Case, especially when it is dear.

The *Cochineal*, when dry, is of good Use in Medicine; but is abundantly more used by the Dyers, as their principal Bases for the Scarlet Colour. Some People use it to colour Sugar, adding a little Cream of Tartar in fine Powder, or some other Acid.

Of Carmine.

Carmine is a very precious and rich Commodity, which is made of *Mezack Cochineal*. 'Tis a Flower or Powder of a most beautiful red Glofa, and that feels like Velvet, which is made by means of a Water, in which the Seeds of *Cheuan*, and the *Autsur Bark*, a Bark brought from the *Levant*, and having something the Appearance of Cinnamon, but of an insipid Taste, have been infused; and which, when prepar'd and dry'd, is call'd *Carmine*; which, to have the requisite Qualities, ought to be an impalpable Powder, of a high Colour, and such as has been as properly and faithfully made as possible: But as its great Price is the Occasion of wicked Peoples sophisticating it, one ought never to buy it but of such Merchants as are above such Frauds, or above selling the second Sort for the first, which is extremely finer. Some are for *Carmine* of *Rocou*; but it gives a Tinge more of an Orange Colour. The Use of *Carmine* is for Miniature, and making the finest red Draperies.

Of fine Lake, and other Sorts.

The fine *Lake* is that which takes its Name from *Venice*; because what has been sold among us hitherto, is brought from thence: But at present several Persons in *Paris* make it to answer effectually; so that a great many Painters prefer it to that of *Venice*. This *Lake* is a hard Paste, made from the Bone of the Cuttle Fish, which is colour'd with a Tincture drawn from *Mezack Cochineal*; of the Wood of *Brasil*, of *Fernambucco*, burnt *English Allam*, *Arsenick*, and a *Livium* of the *Natrum* of *Egypt*, or white Tartar; by means of Cloth they strain it, and proceed as in the making of Indigo: From thence reduce it into a Paste, of which they make Troches, and dry them for Service. The Use of this *Lake* is both for Miniature and Painting in Oil.

Of

Of the Dove Lake.

This is made likewise with *English Alkum*, and form'd into Pastiles of the Thickness of one's Finger, and so dry'd. That of *Venice* is abundantly finer than that of *Holland* or *Paris*, because the White that the *Venetians* use, is much finer and properer to give a lively Colour than the White of *Holland* or *France*. The Use of this Lake is likewise for *Painting*. There is a third Sort call'd *Liquid-Lake*, of which I shall speak in the Chapter of *Fernambucco-Brasil*.

Of fine Turnesol in Linen.

The fine *Turnesol* of *Constantinople* is made of *Holland*, or fine *Cambrick*, which has been dy'd with *Cochineal*, by means of some Acids. This is us'd for tinging of Liguors, as *Aqua Vita*, or the like. The *Turks*, and others in the *Levant*, call this *Turnesol Linen*, the red *Bixerere*.

Of Turnesol in Cotton, or that of Portugal, vulgarly called Spanish-Wool.

The *Portuguese* bring this to us in Cotton, which is of the Figure, Thickness and Size of a Crown-piece; they use it to colour their Gellies, but it is much less us'd than the *Turnesol* in *Linen*; it ought to be of a fine Red; the dryest and cleaneft that can be had; and these are all we have from *Mefleck Cochineal*.

The other Sorts of *Cochineal* are the *Campechy*, the *Tetrachalle*, and the *Wild*.

The *Campechy-Cochineal* is no other than the Siftings of the *Mefleck*; the *Tetrachalle* nothing but the earthy or drossy Part of the *Campechy*; and the *Wild* or *Seed Cochineal*, that which we find upon the Roots of the great *Pimpernel*, call'd by the *Botanists*, *Pimpinella Sanguisorba*.

[*Cochineal* is the *Cochinilla de Lact.* 229. *Cochinilla Hispanis Bryn. Hist. Coec.* 6. *Nepaluchezth seu Coecus Indicus* in *Tunis quibusdam nascens Hrn.* 79. It is a small Insect, brought us dry'd from *Mexico*, the only Place in the World where it is propagated for Use.]

There is not, perhaps, any Drug about which there have been more Disputes among Authors than this: It was at first long believ'd to be a Vegetable Production; and when that Error was got over, and the World was perfectly convinced that it belong'd to the Animal Kingdom, there were yet a Number of mistaken Opinions about its Nature and Origin. It was a long Time believ'd to be of the Beetle Kind, and to resemble what we call the *Lady Cow*; nay, some have

been so hardy to affirm, that it was that very Creature: And an Author of some Credit, in Conformity to this Opinion, gave Figures of it in the different States of an Hexapode Worm, *Aurilia*, and perfect Beetle; Changes necessary to support that Account of its Nature, but such as the Creature never knows. The accurate and indefatigable Mr. *Lewinbeck* came nearest the finding its true Production, in his Examination of its Eggs, in which he always discover'd a six-footed Animal: But we never were truly acquainted with its Nature and Origin, 'till the accurate Mr. *De Reaumur*, in his *Memoirs, Pour servir a l'Histoire des Insectes*, undertook to give the History of it. That excellent Author has referr'd it to a Class of Animals unknown 'till his Discoveries, and, by him, call'd *Pragallinsects*.

Its general History from him, and from the Accounts of intelligent People, who have seen it in *Mexico*, which agree very well with his Opinions, is then, in few Words, that it is a six-legg'd, viviparous Insect, of which the Female is only us'd, which is produced from the Egg in its perfect Form, and has no Transformation, as it is call'd, afterwards. It is very different from what the Accounts of all the older Authors have said of it, and like no other Insect, but those of the same Class. It has no Wings, nor any Use for any; its whole Life, except a few Weeks after it is hatch'd, being spent in one Place, where it is fix'd to the Vegetable it feeds on: The Male is suppos'd to be a small Fly, but is wholly unknown among us, the Female only being what we call *Cochineal*.

The great *Plumier*, therefore, whom this nameless Author attempts to ridicule, was perfectly in the right, and has the Honour to have been the first who spoke with any Degree of Propriety of this Drug; for his comparing it to a Bug, is much more just, than the later Opinion of making it a kind of *Lady Cow*, to which it has not the least Resemblance.

[What our Author calls the wild *Cochineal*, is the *Coecus Radicum*, *Bryn. Coecus tinctorius Polonicus quibusdam Pragallinsecte des Ruches Reaum.* T. 4. p. 116. It is an Insect of the same Class with the *Cochineal*, which remains the greatest Part of its Life fix'd to the Root of the *Polygonum Polonicum Cocciferum*, L. B. 3. 378. *Knawel mecanum flore majore perenne R. Hist.* 1. 213. *Knawel folio et flore candicante Rupp. florum.* 26. It is also found on the other Plants, and in other Places besides *Poland*; but there, and on that Plant, most abundantly.]

26 Of the Scarlet Grain, or Alkermes.

THE Scarlet Grain, which the Latins call *Grana Tinctorum*, the Greeks, *Coccus Insectorius*, and the Arabs, *Kermes* or *Kermes*, is the Seed, or rather Excrement of a little Shrub, whose Leaves are prickly, almost like those of Holly, except that they are much less. They are found in great Quantities in Portugal, Spain, Provence, and Languedoc.

I shall not stay to describe the Shrub which bears this Grain, all Sorts of Authors having made mention of it: I shall only observe, that what we call the Grain, that is, the *Kermes*, is fasten'd to both the upper and under Side of the Leaves of this Shrub: And when it is a good Year, it is one of the principal Riches of the Countries where it grows, especially for the poor People, throughout all Provence and Languedoc; where it costs them nothing but the Trouble of gathering, and they sell it by the Pound to the Apothecaries; who, from the Pulp, make a Syrup they call *Alkermes*, and the Remainder which is left in the Sieve or Strainer, after it is cleans'd, they sell again to the Dyers, for as much as it cost them at first. Those which they would transport, or send to other Places, they dry, as well for physical Use as the Dyers, who use great Quantities of it; for which Purpose they chuse the largest and most weighty, and that which is new, that is to say, of that Year, with its outer Rind, the softest and cleanest that may be; for when it begins to grow old, an Insect breeds in it which eats through the outer Rind, and hollows the Grain in such Sort, that it is all Worm-eaten, very light, and has nothing remaining of what it was but a simple Skin, which greatly diminishes its Virtues. That of Languedoc passes for the best, being commonly large, and of a very lively Red; which is contrary to that of Portugal, which is less esteem'd, as being smaller, leaner, and of a blackish Red.

The *Alkermes*, or *Scarlet Grain*, is reckon'd very cordial, and proper to comfort Women in Child-bed, giving half a Dram of it in Powder, in an Egg, and not *Cochineal*, as many order, because they believe these two Drugs to have the same Virtues. It is also us'd in Dying. The Spaniards, &c. who gather this, wet it with Vinegar, to kill certain little Worms that are in it, and then dry it.

It is proper here to remark the Impropriety with which this Drug is call'd *Grain*, or *Seed*; it being no other than small Bladders, which are form'd on the Leaves and Bark of a little Shrub, well known in the Places before nam'd; for Proof

of which I shall declare what the first Physician inform'd me of by Letter, December 22, 1694: The *Kermes* is not a Seed, but the Shell of a little Worm, which produces it by pricking the Bark of the Ilex or Holm Oak, on which it is frequent, and incloses itself in the Juice that flows out at the Wound, as the Worms which are the Occasion of Galls.

The Fruit of this *Ilex* is not the *Kermes*, but an *Acorn*, like those of the other Ilexes; and this is incontestible: So that the *Kermes* should not be called a *Seed*, but a *Shell* or *Bladder*.

Of the Scarlet Pastel.

As to the *Scarlet Pastel*, which is the Powder that is found in the Grain when new, it ought to be of a very fine Red, of an agreeable Smell, and ought not to be made up with Vinegar at all, as that commonly is which comes from Portugal, which is done to encrease its Weight, as well as to give it a fine Colour. This Cheat is easy to discover, because it will be moist, and yield a strong and very disagreeable Smell. This *Pastel*, which is the most noble Part of the Seed, is never us'd at all in Physick, for want of Knowledge of it; but very much by the Dyers for their high Colour.

Of Syrup of Alkermes.

The Syrup of *Alkermes* is the Pulp of the fresh *Kermes*, and the Powder Sugar of Brasil, or the small Loaf-Sugar reduced to Powder, and mix'd together; afterwards they melt it over a gentle Fire, then put it into little Barrels made of white Wood, such as we receive it in. Great Quantities of it are made, as well at Nismes as Montpellier, which they send to most Parts of Europe.

Of the Confection of Alkermes.

The Syrup of *Kermes* is very little us'd in Physick; but when it is incorporated into a Composition made of the Rhenish Apple, Rose-Water, Raw Silk, and White Sugar, Powder of Oriental Pearl prepar'd, Yellow Sanders, fine Cinnamon, Azure Stone prepar'd, Leaf Gold, a thin Electuary is made of it, which we call Confection of *Alkermes*. Some add Musk and Ambergrease; but this ought never to be done unless by the Advice of a Physician, as these Perfumes are what many Women cannot bear. As to the Manner of preparing this Confection, those that are desirous to make it, may consult the Dispensatories that treat of it; but we have it ready made from Montpellier, as the best, because of the Newness of the Juice, which they have there at Command, and which they transport to other distant Parts.

But

But there are a great many Frauds impos'd upon the World, particularly in *France*, under the specious Name of *Confection of Alkermes from Montpellier*; therefore 'tis better for all Druggists, Apothecaries, and the like, to buy the Juice or Syrup uncompounded, to prevent their being otherwise deceiv'd.

Monfieur *Charas*, in his Dispensatory, p. 314, attributes mighty Virtues to the true Confection of *Alkermes*, and says, that the said Confection is, without doubt, one of the best Cordials that was ever discover'd in the *Galenical Physick*; for it recruits and refreshes the vital and animal Spirits, allays the Palpitation of the Heart and Syncope, very much strengthens the Brain, and other noble Parts, and is an Enemy to Corruption, preserves the natural Heat, drives away Melancholy and Sadness, and maintains the Body and Spirits in a good Condition. It may be taken by itself, or in any other Liquor, from a Scruple to a Dram or two.

The *Kermes, Coccum Insectorium, Lemery. Granum & Coccus Baphica*, has a thick Shell or Husk, like the Juniper-Berry is round, smooth, shining, of a fine red, fill'd with a Juice of the same Colour, of a vinous Smell, the Taste a little bitter, but agreeable. The Tree which produces it is a little Shrub, whose Leaves are like the Holly, but less, and more indented on their Sides with prickly Thorns: The Branches bear Abundance of Shells as well Flowers, which afterwards turn into Fruit, which grows in separate Places. The Fruit is oval, and thick, cover'd at the Top with a black Cap: The Skin of it is of the Nature almost of Leather; it contains a Kernel which is divided into two Halves. This Shrub grows in the hot Countries, as was said before.

The Origin of the *Kermes*, proceeds from a Kind of little Worm in the *Holme*, or green Oak, on which they feed; it produces a Cod which is fill'd with Juice, and which is very red when it is brought to us. This little Insect is inclos'd in the Cod. We have had a very curious Discovery of this, from Mr. *Fagon*, chief Physician to the King; and it is confirm'd by a Circumstance, which is apparent when the *Kermes* is dry'd, for then it is fill'd with a vast Quantity of Worms and Flies, almost imperceptible, which convert all the internal Substance of the Berry into little Insects, and leave nothing but a light Husk or Skin behind. 'Tis easy to apprehend that these little Worms, &c. come from the Eggs which the first Worms which enter'd the Cod produc'd. To remedy this Accident, which so much concerns the good Effect of the *Kermes*, every one ought to let the Cods lie some Time in

Vinegar before they are dry'd, by which Means the acid Liquor will destroy those little Worms.

[*Kermes* is the *Chermes seu Coccus insectorius*. Park. 1395. *Chermes, Grana Tinctorum, Coccus baphica, Coccus Insectorum*. Mont. Ex. 9. *Kermes sive Chermes*. Ind. Med. 43. It is an Insect brought to us from *Provence* and *Languedoc*, where it is found on the *Ilex Coccigera*, or Scarlet Oak. The *Ilex Aquifolia sive Coccigera*. Park. 1394. *Ilex aculeata Cocci glandifera*. C. B. Pin. 428. Tourn. Inst. 583.

There have been almost as many and as various Opinions about the Nature of this Drug, as of the former: It has been guess'd by many to be a Vegetable, and by many others to be an Animal Substance; and not only Mr. *Fagon*, but since him the Count *Marfigli* has also endeavour'd to prove it to be a Vegetable Excrescence.

The first who open'd a Way to the true Discovery of what it was, were Mess. *De la Hire* and *Sedileau*, in the Accounts they gave of the Green-House Bug, as we call it; an Insect of the same Kind very common on Orange-Trees: Mr. *Cestori* after them gave also very great Light into it; but the true and accurate Account of its Nature and Origin we owe to the same celebrated Mr. *De Raumar*, who, from the Observations of other eminent Naturalists, and his own Experiments, determines it to be of a Class of Insects little understood before his Time, and which he calls *Gallinsects*.

The Male of this Species is also a small Fly, but the Female without Wings, and fix'd as the Cochineal to the Tree it feeds on. It is wonderfully prolifick, often containing not less than two thousand Eggs, every one of which produces an Insect in its perfect Form, and the Females subject to no Kind of Transformation afterwards.

The Confection was originally a Composition of *Mesue*, but has undergone many Alterations since. Our College Dispensatory has order'd it in a more simple and easy, and at the same Time a much better Way than any of the former; which is as follows: Take Rose-Water two Pound, Juice of *Kermes* three Pound, fine Sugar one Pound; boil these almost to the Consistence of Honey, and then stir in the Powders of Cinnamon and *Lignum Aloes*, of each six Drams.]

27. Of *Amomum* in Berry, and the Rose of Jericho.

THE *Amomum Racemosum*, or that in Clusters, or the Raisin *Amomum*, is a Kind of Fruit we receive by the Way of *Holland* or *Marseilles*. It grows in several

Several Parts of the *East-Indies*; we seldom see it in Bunches, but much oftner in the single Pod.

It grows upon a Shrub whose Leaves are of a pale Green, longish and narrow; it is, in some Sort, like a Muscat Grape in Colour, Size and Figure, but it is much fuller of Seed, and has less Juice in it.

It is also particular in this, that all the Pods being without Stalks, are strongly stuck, and as it were glued against a long Nerve, which they encircle round to its End almost, and which serves them for Basis and Support, like the Grains of Pepper: The Top is terminated by a Kind of Button, and it is generally divided into Cells.

On Opening these Pods we find them full of square purple Seeds, join'd and, as it were, glued to one another, making altogether a round Figure, conformable to that of the Pod, and which are cover'd with a white Film very delicate, and divided into great Humps by a like Membrane, but in such a Manner as makes it easy to separate them: Their Taste is sharp and biting, and their Smell extremely piercing and aromatick.

Choose the freshest Seed you can get, with the roundest Husk, and of the most lively fair Colour, heavy, and well fill'd. Cast away what is light and open, containing a black wither'd Seed; but esteem those that are well fill'd with Seed, large, plump, of a warm picquant Taste, very aromatick, and the most resembling the Cardamoms: It contains a great Quantity of volatile Salt and exalted Oil.

The chief Use of the *Anomum* is for Treacle, such as that of *Venice, London, &c.* for which make use of the cleanest and best fed Seed. It is also used to incise, digest, resist Poison, expel Wind, strengthen the Stomach, give an Appetite, and promote the *Menses*.

Several Persons do not know this Drug but under the Name of the great Cardamom, which is no other but the Grain of Paradise, of which I shall take Notice in the following Chapter. There are other Seeds which bear the Name of the *Anomum*, as that of *Pliny*; which is a red Fruit, and altogether like that which is within the Fruit of the *Alshing*, which grows on a Shrub which is very common. There is another Sort which the *Dutch* and *English* call *Anomi*, and we *Jamaica-Pepper*, which is the Fruit of an Indian Tree, as will be seen in its proper Place. I must advertise you, that when you meet with the Name of *Anomon*, or *Anomi*, in Authors, you ought to use no other than this cluster'd *Anomum*.

All Persons that deliver any Receipts *Letemery*. concerning *Anomum*, mean the *Anomum Racemosum*, or cluster'd *Anomum*,

which the Description before is given of; but there are several other little Seeds call'd by that Name, as the *Anomum falsum*, seu *Pseudomomum*, or the Bastard *Anomum*: It is a little black Fruit of the Nature of the Gooseberry or the Juniger Berry, which grows upon a Gooseberry Bush, call'd *Grossularia non spinosa, fructu nigro*, or the Gooseberry without Pickles, with black Fruit, or the black Gooseberry. 'Tis of little or no Use in Physick, any more than the *Anomum* of *Pliny*.

The small Spice which the *Dutch* and *Portuguese* call *Anomum*, and the *French* Pepper of *Thevet*, is round, and as big, or bigger, than Pepper; of a reddish Colour, appearing at one End like a small Crown, of a Taste and Smell like a Clove, a little pungent and aromatick; it has likewise the Virtue of the Clove, but is scarcer. Some call it the small round Clove, as is describ'd by *Baubin*, p. 194, with the Name of *Anomum quorundam odore Caryophylli*.

[This is the *Anomum Racemosum*, C. B. Pin. 413. *Anomum novum Cardamomi vulgaris facie, five Indicus racemus*. J. B. 2. 195. It is brought to us from the *East-Indies*.

The Descriptions of Simples among the old Authors, particularly the *Arabians*, are so short and imperfect, that notwithstanding the Perfection that the Knowledge of Botany is now arriv'd at, it is not known what was the true *Anomum* of the Antients, almost every Author having had a different Opinion about it. However, if this be not the very *Anomum* of the Antients, it at least comes the nearest it of all others, and ought to be used wherever *Anomum* is prescribed.]

28. Of the Great Cardamome.

THE great Cardamome, which the *French* call *Maniguette*, or Grains *Pomet*. of Paradise, is a triangular Seed of a reddish Colour without, and white within, of an acrid picquant Taste, like that of Pepper; which is the Reason that the Hawkers frequently sell it for Pepper.

The Plant which bears this Seed, has green Leaves, among which comes a Fruit, or rather a Husk, of the Size and Figure of a Fig, of a fine red Colour, in which are enclos'd these Grains of Paradise: It is call'd *Maniguette*, or *Melaguette*, from a City of *Africk*, call'd *Melaga*, from whence they used to bring it into *France*; but at present it is brought from several Countries, by the Way of *St. Malo*, and other Places.

It ought to be chosen of a high Colour, fresh, well fed, and of a sharp piercing Taste.

[The



The Grain of Paradise.



The true great Cardamom.



The Lesser Cardamom



Nigella Romanas.

[The *Grana Paradisi* are the *Cardamomum Arabum majus*. Ger. 1358. *Cardamomi genus maximum, Grana Paradisi seu Melleguetta*, &c. J. B. 2. 204. They are brought to us from Guinea, and are of a Taste between *Cardamom-Seeds* and Pepper. They ought to be distinguish'd from the true *Cardamomum majus*, and it is a great Error to use them in the Place of it. The true *Cardamomum majus*, is the *Cardamomum cum filiquis longis*. J. B. 2. 205. *Cardamomum majus Officinarium*. C. B. P. 413. This is brought us from Java, but is very seldom seen in the Shops. The Husks are sometimes as long as ones Finger, and full of an angular brown aromack Seed; and this is what is described by *Pomet* in the Beginning of the following Chapter.]

29. Of the true Great Cardamome, and the Small Cardamome.

THE true great *Cardamome* is a reddish, sharp, angular Seed, enclosed in a Pod of the Length of a Child's Finger, made triangular; it grows upon a Plant, which some have assur'd me is very luxuriant. and whose Leaves are like those of the Trefoil, ending in a Point, and much indented; it grows in several Parts of India: These Pods are very rarely brought into France, and are of very little Use, because the little or smallest *Cardamome* is more enquired for, as well by Foreigners as ourselves, as having much more Virtue in it than the true great Sort. However, as it is sometimes met with, I shall observe that it ought to be chose new, and such as comes nearest the Taste, &c. of the smaller *Cardamome*.

The small *Cardamome*, which is what is most common among us, and brought from Holland, is a little Husk or Pod of a triangular Figure, on the Outside of a light grey, strip'd and adorn'd with a small Tail of the same Colour. When open'd, you'll find a Quantity of small Seed in it of the Figure and Taste of the *Amomum*, of which I have been speaking of before.

The Plant which bears the small *Cardamome* is as yet unknown to me, notwithstanding the diligent Enquiries I have made; but in all Appearance, it is like the true great Sort, and has no other Difference, but what the Diversity of Places where it grows gives it. It is brought to us by the Dutch and English, from the Kingdom of Visapour, where it is very scarce, and only used at the Tables of the Great, being the best Spice of that Country. Chuse the freshest, well fed, weighty and least fill'd with empty Husks and little Straws, well dried and sound: It is best not to

open the Husks 'till the Time of using the Seed, because it keeps much best in them: When they are to be used, separate them from the Husks, and chuse the most compact, best fed, highest colour'd, and most aromack: This we chiefly use in Medicine, but the Dutch use it much for chewing.

His Description of the great and lesser *Cardamome* differs nothing from *Pomet*: Lemery. But the third or least Sort is call'd simply *Cardamome* for its Excellence, because it is better and most used of any of the three. It is brought to us in little triangular Husks or Pods, of an Ash Colour, tending to white; they stick or adhere together by little Fibres, but are easily divided from their curious Coverings; the Seed is then of a purplish Colour, and of an acrid, biting, aromack Taste. All the *Cardamomes* contain in them a great deal of volatile Salt, and essential Oil.

They are proper, particularly the least, to attenuate and refine the gross Humours, to expel Wind, fortify the Head and Stomach, assist Digestion, excite Seed, provoke Urine and the Terms, resist malignant Vapours, and to chew in the Mouth to procure Spittle. It is call'd *Cardamome*, or sweet *Nasturtium*, because it has a Smell much like the *Nasturtium*, or Cresse, from whence it is deriv'd.

They are used from half a Dram to a Dram in Powder, or you may make a Decoction of them in Wine or Water. *Cardamome-Water* is made of them, being sweeten'd with double refin'd Sugar; 'tis a very good Stomachick Water, helps Digestion, and is an Antidote against the Plague, or any malignant Difease. A Tincture drawn from it in Tincture of Salt of Tartar, is excellent against the Stone, Strangury or Stoppage of Urine. Dose from two Drams to half an Ounce.

[This is the *Cardamomum simpliciter in Officinis dictum*, C. B. Pin. 414. *Cardamomum cum filiquis seu thecis brevibus*. J. B. 2. 205. It is brought to us chiefly from Malabar. The Plant which produces the true great *Cardamome* is common in the Woods of Java; it grows to the Height of seven Feet; the Stalk is strong, and envelop'd by the Leaves, as the Stalks of some culmeferous Plants, but not jointed like them: The Flowers grow on the Tops of the Stalk and Branches, and are like the Flowers of our Hyacinths, white, with a purple Border round the Edge. The Leaves bruised yield a pleasant Smell, and are hoary underneath.

That which bears the lesser *Cardamome* has a Stalk jointed like the Reed, and beset with Leaves not unlike those of the same Plant. It is two,

two, or at the utmost three Feet high; the Flowers are of a whitish yellow, and four-leav'd; after which come the Pods, which are the *Cardamum minus* of the Shops. These Flowers and Pods do not grow, as in the larger Kind, on the Tops of the Branches, but upon particular separate Stalks, that arise from the Root without Leaves, and that perish as soon as the Seed is ripe.]

30. Of the *Nigella Romana*.

Pomet. THE *Nigella Romana* Seed is the Seed of a Plant about two Feet high, having little green Leaves indented and snipp'd deep, among which come white bluish Flowers, and then Husks or Pods, in which are contain'd a longish Seed of a grey Colour, piquant Taste, a strong and aromatick Smell.

Chuse the newest, plumpest Seed, of a fine bright yellow, of the most aromattick Smell as well as Taste, that you can possibly meet with: That which comes from *Italy* is the best, and more esteem'd than that which grows among our Corn. The Use of this Seed is to kill Worms, correct Wind; and some Persons affirm it to be a very good Antidote; they reckon it likewise very useful to create Milk in Nursera.

[This is the Seed of the *Gith. Officin. nigella Flors. minore simpliciter condido*. C. B. Pin. 145. *Melanthium Calyc. et Flors. minore Semine nigro*. J. B. 3. 208. It is a Plant of a Foot high; the Leaves are finely divided, the Flower and Seed Vessel both large for the Size of the Plant, and the Seed Vessel is divided into five Cells. It is very little used in Physick.]

There are several other Sorts of Seed, which I shall forbear to mention, because we seldom meet with them, as the *Menise*, *Messe*, or *Mungo*, which the *Indians* use the Plant of to feed their Horses with, and the Seed in Physick to cure Fevers, as we may see in the *Indian History of Garcias ab Horto*. There is another Sort, the *Bisnague*, as yet very scarce, which the *Turks* use, as several Persons of Quality in *France* do, to clean their Teeth. Another Kind there is, call'd *China Anise*, or *Badian*, which serves the Eastern People, in Imitation of the *Chinese*, to prepare their Tea and their *Sorbec*.

This Seed is entirely like that of the *Coloquintida*, except that it is of a dun Colour, as that it shines and is of an agreeable Smell: It is contain'd in small Pods, thick and hard. 'Tis with this Seed, and the Root *Nish*, that the *Chinese* make their Drink of Tea, and *Sorbec* more agreeable than in *France*: The Quantity is two Drams of *Nish*, four Ounces of boiling Water, half an Ounce of Tea, and a Dram of *China Annisifed*.

There are a great many other Seeds worth the Druggist's Knowledge, as well as others; but they being so common, it would be counted superfluous to name them, as Lettuce, Violet, Succory, Poppy, Mallows, Turnep, Radish, Holyoak, Fleawort, &c.

There are other Seeds commonly in Use, and as commonly known, as the four cold Seeds, Citrus, or Water-Melons, Gourd, Melons, and Cucumber, which are chiefly used for Emulsions, and sometimes to express a cooling Oil from them for the Skin, and other Things of the like Nature, that tend to the Ornament of the Complexion, &c. The Method of making all Sorts of Oil by Expression, is so universally known, it would be lost Labour to expatiate upon it, there being no more in it than blanching the Seed, beating it in a Mortar, and pressing the Oil from it cold: After the same Way is made the Oil of Ben, White Pine, Poppy, sweet or bitter Almonds, Pistacia Nuts, &c.

Authors have also given the Name of a Seed to a Sort of Plant which has neither Leaves or Root, which is what we call *Dodder of Thyme*, whose Description you will find in the Chapter of *Epithymum*.

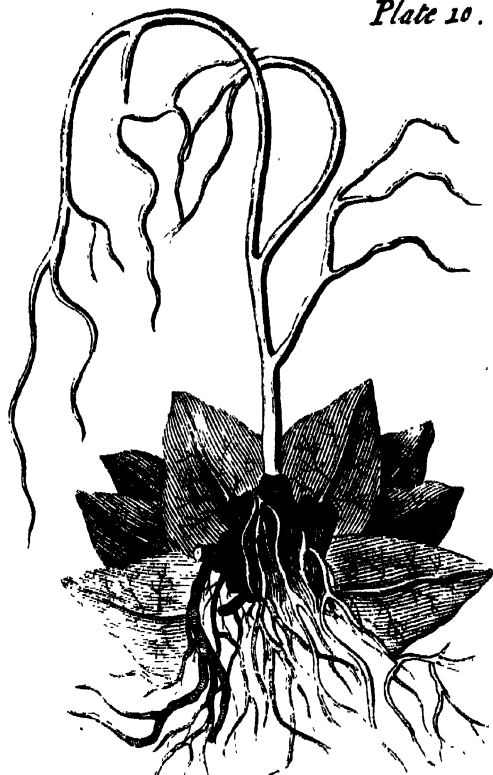
31. Of the Sago of the Indies.

SAGON, or *Sago*, is a round Seed, whitish, but a little tending to grey; it is unequal in Shape and Size, and is not bigger than the Head of a large Pin.

This Seed is but little known in *France*; its Taste is Stiptick, tending to insipid, and not unlike *Piedmont Rice*, or cleans'd Millet. The *Indians* boil it 'till it is converted to a Jelly, with which they nourish themselves for a Time, and believe it has the Virtue to re-establish their Health and prolong their Days.

It has been long in Dispute what Part of the Tree or Plant which produc'd it, the *Sago* really was, and many others as well as *Pomet* have taken it for a Seed; but later Discoveries have made it certain, that it is prepar'd from the *Facula* of the Pith of a Species of *Indian Palm*. The *Palma Indica candide in annulos protubantes distincto, fructu prunisiformi*. R. Hist. 2. 1630. *Zagu, seu Arbor farinifera*. Jonf. Dendr. 144. It is prepar'd by taking out the Pith, and beating it in large Mortars; and afterwards mixing Water with it, and straining the Liquor, the *Facula* of which they form into Cakes for their own Use, eating them as Bread when their Rice is scarce; and Part of it they granulate and dry, to send into *Europe*.

The End of the first Book of SEEDS.

*Ippecacuanha.**Contrayerva.**The two kinds of
Contrayerva.*

*Dorstenia Dentaria radice Sphondylii folio
Placenta ovali.*



*Dorstenia dentaria radice folio minus laciniato
Placenta Quadrangulari et undulata.*



The true Rhubarb



Mountain Rubarb.



Jalap.



Mechoacan.

BOOK the Second.

OF ROOTS.

P R E F A C E.

I Understand, by the Root, that Part of a Plant which is in the Earth, and which draws up the Nutrition, and communicates it to other Parts produc'd from thence, as the Stalk, the Leaves, the Seed, &c. The Roots which we commonly sell, are not only many in Number, but very different in Figure and Virtue. Our Herbarists supply us with many, which require no other Preparation than to be cleans'd and dry'd, which is sometimes well, and sometimes ill done, according to the Capacities of the Herb-Dealers; such as Enula Campana Roots, Marsh-mallows, Avens, and the like. We have others brought from foreign Countries, from some of which the Heart, or inner hard Substance, is taken out, because it is stringy, hard, and useless, as Turbith, Bastard Turbith, White Dictamny, &c. as is practis'd here upon several Roots, as Cinquefoil, &c. We have others brought to us cut into Slices, as Jalap, Mechoacan; in little Bits, as the Lesser Galingal; in larger Pieces, as Rhubarb and Rhapontic; in the entire Root, as Angelica; some adorn'd with their Leaves, as the Virginia Snake-Root; others are brought in long, stringy Fibres, as Sarsaparilla; and last of all, some are wash'd and cleans'd from their outward Skins, as Florentine Orris, and the like.

There is no less Difficulty in the Knowledge of Roots than of Seeds, as well by reason of their different Kinds, as the several Marks which many of them have in common. 'Tis for this Reason we ought to be very circumspect in our Choice, and know the main Distinctions of every one, to make an exact Judgment of them, which is difficult to be done without Practice, and where a Man does not make it his continual Business. Those who want Roots, ought not to go about hunting for the best Bargains, but apply themselves to Merchants in whose Probity they can put their Confidence, especially when the Price is any thing considerable.

Those Persons who value not their Conscience, make no Scruple at all to sell one Thing for another, and ask as much for an Ounce of the Root they deceive you with, as they would sell a Pound of it for under its own Name, as some People sell Tormentil for Contrayerva. It is not to a Person's Advantage to load himself with a great Quantity of these Goods, especially such as there is not a large Demand for, as well because of the Waste in keeping them, as because many are subject to be Worm-eaten, as Angelica, the Acorus Verrus, &c. and to spoil, as Rhubarb, and the like.

1. Of Ipecacuanha, or Ipecacuana.

THE Ipecacuana, call'd Begu-quella, likewise Specacuana Cagofango, Bacula, Belocula, or the Golden Mine Root, is a little Root about the

Thickness of the Barrel of a middling Quill, which the Dutch and Portuguese bring us from many Parts of America, and which is found nowhere but where there are Gold Mines, which has been the Occasion of one of its Names. This is gather'd by those that are condemn'd to the

E

Mines;

Mines; and that which makes it the scarcer, is, that the most industrious Labourer cannot get above a Dozen Pound of it in a Year; and if it were not that it is exchange'd for other Merchandizes, it would be much dearer than it is. The Dutch and others bring us three Sorts of *Ipecacuana*, to wit, the brown, which is the first and best Sort, and consequently the dearest; the second, which is grey, inclining a little to red, and white within, is less strong than the brown; the third is the white, of which I shall speak afterwards.

These Plants call'd *Ipecacuana*, as well the brown as the grey, are of a small Height, partly creeping, partly rising about half a Foot high; the Leaves of them are like those of the *Pellitory of the Wall*, in the Middle of them grow white Flowers of five Leaves apiece, supported by little Heads with a Sort of brown Berries, which when they are ripe, are of a reddish brown Colour, and of the Size of a wild Cherry: These Berries contain a white Pulp full of Juice, in which are enclosed two Seeds, hard and yellowish, approaching to the Figure of a *Lentile*.

This Root ought to be chose fresh, new and well fed, wrinkled, hard to be broke, resinous in its Substance, and having a Nerve in the Middle; take care that it be not mix'd with the Stalk, Filaments, or Threads, which those that sell it oftentimes throw amongst it; and that it be of an acrid, bitter and disagreeable Taste. Some Friends that I have at *Lisbon*, in *Holland*, and at *Marseilles*, have assured me, that the best *Ipecacuana* is the brown, which is chiefly that which comes from the Gold Mines, and that the other two Sorts are brought from the lowermost Parts of the Mountains thereabouts and other moist Places.

The Use of the said Root, is for the Cure of Dysenteries; several People will have it that this Root is alexiterial; but notwithstanding that, I would not advise any Body to make use of it, but with great Precautions, and by the Advice of understanding People, because it works with Violence, whether given in Infusion or Substance. The common Dose is from half a Dram to a Dram in Powder, taken in any proper Liquid in the Morning fasting, and giving proper Liquids two Hours afterwards.

This Root vomits before it acts as an Astringent, which is different from the Operation of other Astringents.

Of the White *Ipecacuana*.

The *White Ipecacuana* differs from the other two, in that the Root is white, and altogether made like the white *Behen*, or the white *Dic-*

tamny Root, and the Leaves resemble those of the round *Garden-Sorrel*. The *Spaniards* and *Portuguese* prefer this *White Ipecacuana* before the two foregoing Sorts, especially for their Women with Child, and little Infants, by reason it works with less Violence, and is commonly given in Substance from half a Dram to a Dram, and in Infusion to two Drams.

In the Month of *January* 1690, there was a Thesis in the Physick Schools of *Paris*, concerning the *Brasil Root*, or *Ipecacuana*; in which it was observ'd, that the *Americans* had it in very great Esteem, as well because they believ'd it was a very powerful Antidote, as because it was very useful for the Cure of many tedious and troublesome Diseases; but, above all, for the Cure of *Dysenteries*, and other Fluxes of the Lower Belly.

Some will have it, that M. *Helvetius*, a Dutch Physician, brought the *Ipecacuana* into Use among the *French*; but I can assure you to the contrary, because above twenty Years before that I saw it at *Paris*; for a Proof of which I remember there was a Quantity in the Shop of M. *Clauquelle*, Apothecary, which fell into the Hands of M. *Poulain*, his Son-in-Law, who was likewise an Apothecary, and he afterwards introduc'd it again into Practice, by the Direction of *Helvetius*.

The *Ipecacuanha*, or *Specacuanha*, is a small Root, of the Thickness of a *Lemery*. Quill of a moderate Size, which is brought to us dry from several Parts of *America*. There are three Species or Sorts of it, the brown, the grey, and the white. The brown is the strongest and most valued of all; it is the compactest, crooked, wrinkled in Curls, stringy in the middle, difficult to break, of a smart Taste, and bitter: It grows in *Brasil*, &c. as said before by *Pomet*.

The Root of the grey *Ipecacuanha* differs from the former both in Colour and Virtue, for it has less Efficacy. This is brought from *Peru*, by the way of *Cadiz*, and the *Spaniards* call it *Bexugillo*.

The third or white Sort is different from the two others, not only in Colour, but in Figure; for it is neither crooked nor uneven. Some Authors say it is small as *Penny-royal*, and that the Leaf is soft and woolly, and that the Flower is white: Others will have the Leaf like round *Sorrel*. It grows low, and in moist Places. The way to chuse any of the three Kinds, is to take the largest and best grown.

This Root is both purgative and astringent; it works upwards and downwards, according as the Humours are more or less soluble; strengthens and corroborates the Fibres of the *Viscera*, by means of its earthy Parts. It is one of the best Remec-

Remedies, and most certain, for the Cure of the *Dysentery* or *Bloody-Flux*: It stops likewise better Scourings of the Guts, but not with that equal Success. The Dose beaten into fine Powder, is from 20 to 30 Grains of the brown, from 30 to 40 Grains of the grey, and so to a Dram of the white Root. The first who brought this into Use in France, was Monsieur *Le Gras*, a Physician, (who had made three Voyages to America) in the Year 1672. It was shewn afterwards by the Abbot *Bourdette*; and, in one of my Courses of Chymistry, I had some given me by a Druggist, but without any Knowledge or Instruction into its Qualities at that Time.

[It is the Root of the *Herba Paris Brasiliensis polycoccus*. R. Hist. 1. 669. *Periclymenon acedem Planta Brasiliensis fasciculis congestis albis*. H. Ox. 3. 535. It is but very lately that it has been known in Physick among us. M. *Le Gras*, in 1672, first brought it into France, and Mr. *Cleauquellus* gave it but with very ill Success, which was owing to his giving it in too large a Dose. The elder *Helvetius* afterwards used it successfully, of whom the French King purchased the Secret, and all that related to the Use of it, and communicated it to the World. It is the best Vomit ever known in Medicine, never fatigues the Stomach, and is beside the best Medicine known in *Dysenteries*, in which if the first and second Dose do not produce the expected good Effects, it ought to be continued every Day in Doses of three or four Grains each, to act as an Alterative. When given as a Vomit the general Dose is half a Dram, and it operates so well in Substance, being only powder'd, that all Preparations of it are needless.

The *Pseudo Specacuanna* is the Root of a Species of *Apocynum*.] See Page 155.

2. Of the *Contrayerva* Root.

THE *Contrayerva* is the Root of a Plant which has green creeping Leaves, full of small Fibres, of the Figure of a Heart, in the middle of which arises a Stalk wholly naked, about a Finger's Thickness. It is brought to us from *New Spain*.

Chuse such Roots as are fresh, well fed, adorn'd with long Filaments, or fibrous Strings, that are knotty and ponderous, of a yellowish red on the Outside, and of an Ash-colour'd white within, and a sweet aromack Taste.

It is an *Alexipharmack*, very powerful for resisting several sorts of Poisons; and is therefore call'd by the Spaniards *Contrayerva*, which signifies in their Language a Counter-Poison.

There grows also in Peru a Root very like it, which is call'd *Radix Drake*, from Sir *Francis Drake*, who brought it first into England. Notwithstanding that the Roots of the *Contrayerva* are an Antidote, the Leaves are a mortal Poison.

It is a good Sudorific taken in Powder from four Grains to fifteen, in any proper Liquor, and this Dose may be repeated three or four Times if it be found necessary. It is good in Pains of the Head, and in Rheumatisms and the Sciatica.

Several People make Use of this Root reduced to Powder, and mix'd with double the Quantity of Jesuits Powder, or the Bark, to turn off the Fits of an Ague or intermitting Fever; and others again, mix the same with *Specacuanna*, to cure a Looseness or Bloody-Flux.

We sell also the Root of a Plant which grows plentifully throughout all France, for white *Contrayerva*: It likewise grows in every Garden, and is known every where by the Name of *Asclepias* or *Hirundinaria*. This is very white, and is called, by every Body in France, *White Contrayerva*, because it is pretended this has the same Virtues. There is a Composition of several Drugs in Mr. *Charas's* and other Dispensatories which is call'd the *Contrayerva Stone*, by Reason this Root is the Basis of the whole. It ought to be chosen new, well grown, and of a piercing aromack Taste.

Bauhin makes the *Contrayerva* a Species of *Cyperus*, and calls it *Long Cyperus* with the sweet Root. You ought to chuse that which is found, new, aromack, and sharp in Taste. It is an excellent *Alexipharmack*, resists Poison, and cures the biting of Vipers, other Serpents, or any venomous Beast; and is good against Calentures, Measles, Small-pox, Spotted Fever, Plague, or any malignant and pestilential Disease. *Schroder* says it is good in the Plague, even when the Tokens appear: It resists Melancholy, cheers the Spirits, and makes the Heart merry. It may be given either in Powder, from half a Dram to a Dram, or in any cordial Draught or Bole.

[The Name of *Contrayerva* has been at different Times given to many different Roots, supposed to have the Virtues of resisting Poisons. But what we have now in England under that Name are the Roots of the two Species of the *Dorstenia* of *Plumier*; which have both the same Shape and Virtues, and are gather'd and sent over indifferently to us.

The one is the *Dorstenia Dentaria radice Sphenodylii folio placenta Ovali*. Act Phil. Lond. No. 241. And the other the *Dorstenia Dentaria Radice, folio minus laciniato, placenta quadrangulari, et undulata*. Ibid.

Doctor *Houston* gather'd the first in *New Spain*, near *Old Vera Cruz*; and the other on the high Rocky Grounds about *Campechy*.

The Roots are in great Esteem in Fevers of all Kinds that can be reliev'd by encreasing the Discharges through the cutaneous Pores, and for throwing out the Small Pox.]

3. Of Virginia Snake-Root.

Pomet. THIS *Snake-Root*, which is called by some *Dittany*, by others, *Contrayerva of Virginia*, &c. is a Plant which grows there, and in several other Parts of the Northern America, and which is used successfully by the English against all sorts of Poisons, and the biting of venomous Creatures; and is also very proper against all epidemical Diseases. Monsieur *D'Aquin*, first Physician, made choice of this Root, as one of the principal Ingredients in the new Reformation of *Venice-Treacle*, set down in Monsieur *Charas's* Royal Galenical and Chymical *Pharmacopœia*. As to the Goodness of this, you ought to chuse such as is fresh and new, thick and well fed, of a strong Smell, very much like *Spike* or *Lavender*.

There are several kinds of this Root, *Leмери.* as the greatest, the less, and the least, together with *Parkinson's Polyrhizos Virginiana*; The least only is that which is sold in our Shops, which is a small fibrous or stringy Root, of a kind of Ash-Colour, with a spicy or aromatical Smell, and a strong, hot, bitter Taste, and is brought to us from *Virginia*, *Maryland*, *New Jersey*, *Pensylvania*, and *Carolina*; but that which comes from *Carolina*, *St. Augustine*, and other the most southern Places of the *Floridan* Continent, is much the better, inasmuch as those Climes are hotter: That which is clear in Colour, clean and free from Dust and Sand, and very strong in the Scent, is the best. It is one of the greatest *Alexitericks* in the World: It is known to cure the Biting of the Rattle-Snake upon the Spot, which, without this Remedy, is, for the most Part, present Death. The Power, Malignity, and Volatility of the Poison, is not so swift and great, but the Subtily, piercing Qualities, and *Aleripharmack* Virtues of this Medicine yet exceeds it, disappointing all the ill Effects of the viperine Poison, if given in due Time. And, without doubt, if it will cure the Biting of the Rattle-Snake, the most malignant and dangerous of all Serpents, it will cure the Biting of all other Serpents, as well as other poisonous and venomous Beasts whatsoever, and also the Biting of mad Dogs, and Wounds made with poison'd Arrows; for which Things it

is to be esteem'd as one of the most valuable Drugs yet discover'd.

It is a known, and often approv'd Remedy against the Malignity of the *Masles*, *Small-Pox*, *Spotted-Fever*, and the very *Plague* itself; as also against all manner of *Burning* and *Pestilential Fevers*, not only preventing the Infection before it has spread itself, but curing the Disease after the Infection has seiz'd; for which Purpose, there is no Vegetable, or any other Remedy that I know of, equal to it, in the whole Course of Medicine. The Experience of this Part of the World may justly recommend the Virtues of this Simple every where, as good against Faintings, Swoonings, Sickness, and all Disaffections from the Heart. It is used in a Decoction by the *Indians*. We commonly give it in Powder from six Grains to a Scruple; or in an Infusion in Wine, Brandy, or Water, from a spoonful to four, &c.

[This is the Root of a Species of *Birthwort*. The *Aristolochia polyrhizos auriculatis foliis Virginiana*. Hist. Ox. 3. 510. Tourn. Inst. 162. This Plant produces the Root we first receiv'd; and therefore is esteem'd the true and genuine Snake Root: But beside it there are the Roots of two other Species of the *Aristolochia* sent over and used in common with it, viz. those of the *Aristolochia violæ fruticosa foliis Virginiana cujus radix serpentaria dicitur*. Raii Hist. 3. 394. And of the *Aristolochia pistolochia seu Serpentaria Virginiana caule nullo*. R. Hist. 3. 394. both which are of much the same Shape and Virtues. These Plants have Semifistular Flowers.]

4. Of the several Sorts of Rhubarb.

THE *Rhubarb* of the *Levant* is the Root of a Plant, of which I know *Pomet.* not positively the true Place where it grows, any more than its Figure. For this Reason I was oblig'd to take the Impression which is represented by *Dodonæus*, it not being possible otherwise to get the Figure of the Leaves, and the Manner how they are disposed. For the Flowers, I have had a good Quantity of them presented to me by a Friend.

Dalechamp, in the 558th Page of his Second Volume of the *History of Plants*, makes a large Discourse of the *Rhubarb*, and of the Place from whence it is brought to us; but he, and other Authors that write about it, speak so variously, there is nothing to be depended on; so that I shall only give you an Account of what was writ to me from *Marseilles* the 25th of July 1692. "The *Rhubarb* comes from *Persia*, some say it grows there; but others will have it that it comes

“ comes from the Confines of *Muscovy*; the most common Opinion however is, that it grows in *Perfia*. Mr. *Tavernier*, assures us, in his Book of Travels, that the best *Rhubarb* grows in, and is brought from the Kingdom of *Boutan*.

This Root, newly drawn from the Earth, is thick, fibrous, blackish on the Outside, and of a reddish Colour marbled within: It bears large Leaves, from whence arise little Flowers, resembling Stars; after which follow the Seed. Chuse your *Rhubarb* new, and that which is in small, even Pieces, pretty firm and ponderous, of an astringent Taste, and bitter, the Smell not disgustful, but rather aromack, and of a yellow Colour, bright on the Outside, and of the Colour of a *Nutmeg* within, and such as, when infused in Water, will produce a Tincture like that of *Saffron*, and, when bruised in a Mortar, the Colour within is of a lively reddish Cast; but the principal Caution is that you do not buy old *Rhubarb*, made to look well with Powders, which we need not mention, which may be easily found out in the handling of it, as the yellow Powder will stick to your Fingers.

Great Virtues are assign'd to *Rhubarb*, especially for strengthening the Stomach, and purging the Gall gently, principally if assisted with any other Purgative. It is esteem'd likewise very serviceable for stopping of Bloody-Fluxes, and other Loosenesses, either chew'd in the Mouth, or grossly bruise'd, and infused in any proper Vehicle: It is also given to Children to destroy Worms; and, in short, is an admirable kindly and salubrious Medicine, as well in Age as Youth, and the full Vigour of Years; in all which Difference of Age or Circumstance, duly proportion'd and apply'd, it works friendly to Nature, and efficacious to the Disease.

Of the American Rhubarb.

Within these few Years we have had several Plants of *Rhubarb* introduced into our Gardens, which Monsieur *de Toisy*, Vice-Roy of the Islands, brought from the *West-Indies* into *France*.

There are some Places where this *Rhubarb* grows so large, and comes so near the true *Persian Rhubarb*, that it is very difficult to distinguish it. I can also affirm, that I have myse' pull'd up out of the Earth, near the Bridge at *Lyons*, on the River Side, several Roots of this *Rhubarb*; which being scrap'd and dry'd, scarce differ'd at all from the true *Rhubarb*.

Several Persons take this *Rhubarb* for the *Rhapontic*, because of their great Likeness, and among others *Prosper Alpinus*, who brought it

from the *Indies* to *Pavia*. The great Difference between *Rhubarb* and *Rhapontic* is, that the *Rhubarb* is generally in roundish Pieces, and has its internal Lines crossways; and on the contrary the *Rhapontic* is in long Pieces, and has its Lines reddish, and running lengthways; and as this Difference is known but to few People, those who send us the *Rhubarb*, frequently put *Rhapontic* among it, which is the Cause that the true *Rhapontic*, that is that of the *Levant*, is so scarce; and whoever wants *Rhapontic*, must look for it among *Rhubarb*, for we receive no *Rhubarb* without more or less of this among it; but beside the Marks before given to know the *Rhapontic* from the *Rhubarb* by, the surest of all, is to taste them; for the true *Rhubarb* gives no Viscosity in the Mouth, and the *Rhapontic* does.

Monks Rhubarb, or that of the Mountains.

The Scarcity of the *Levant Rhapontic* has given Occasion to some ill People to sell the Roots of the round-leav'd *Hippelapathum*, a Plant frequently cultivated in Gardens, or of another *Hippelapathum*, with large but not round Leaves, found on some Mountains, in the Place of it, to People who do not understand the Difference; tho' the Distinction is easy; for the *Levant Rhapontic* is yellow without, and reddish and marbled within, whereas this *Hippelapathum* is black and rough without, and yellow without any marbling within.

Rhabarbarum, *Rheum*, in *English* *Rhubarb*, is a thick fungous Root, *Lemery*. which is brought to us dry'd from *Perfia* and *China*, where it grows, and sometimes from *Turkey*, which last is thought by the *English* Merchants to be the best of all, being a sort of middle-siz'd Pieces, smooth, fresh colour'd, and of a mix'd yellow Oaker Colour, of a lively strong Smell, firm in cutting, but not very hard, or crusty; being chew'd, 'tis of a bitterish sub-astringent Taste, giving the Spittle a fresh yellowish Colour, and a good Flavour, not very heavy, nor yet spongy, or hollow, or rotten within. The next Sort of *Rhubarb* is that which is supposed to be brought from *Tartary*, *Muscovy*, and *Russia*, which is generally large and heavy, and more crusty, though many times very fresh and well scented, but nothing near so good as that brought from the *Levant*.

There are several Kinds of *Rhubarb*, as the *True*, the *Pontick*, and the *Bastard*: The *True* is that we have already describ'd by the Name of *Rhabarbarum*; the Word *Rha* some will have to come from the Name of a River in *Pontus* now call'd *Volga*; others from the *Arabian* Word *Raiwand*;

Rheum; others say it comes from *Berhman*, a City of *India*, above the River *Indus*, and that *Rha Indicum* and *Berbericum* were all one. It is brought from *China* to *Turkey*, and so to *Venice* by Land; this lasts longer than what our Merchants bring by Sea, which corrupts sooner. It is a most admirable Purgative, expelling sharp, griping, clammy, and tartarous Humours from the Stomach and Bowels, it cures the griping of the Guts, Cholick and sharp Fluxes to a Miracle, so that it may be allow'd to be one of the best Specificks in the World: It cures all sorts of Fluxes whatever by carrying off the Cause, and therefore is good against the Bloody-Flux, Dropsy, Jaundice, green Sickness, Rickets, Melancholy, and other the like Diseases. It is given in Powder from a Scruple or two to a Dram, and a Dram and half, or in an Infusion from a Dram to two Drams, corrected with Cinnamon, and other Aromatics; it may be quicken'd with *Sassafras*, *Talap*, &c. *Schrader* makes an Extract of it with *Endive*, *Succory* or *Agrimony* Water, acuated with some Drops of Oil of *Tartar per Deliquium*. Dose of this from a Scruple to a Dram. Likewise, you have a Syrup of *Succory* with *Rhubarb*; *Schrader* says, *Rhubarb* is the most used of all Purgatives, and without Danger in all Ages, it may be safely given to Children, and Women with Child, and is best without Correctors, only two or three Drops of any of the essential Oils, as *Aniseed*, or the like.

Of Pontick Rhubarb.

Some Authors will have this to be the same with the former, saving only the Climate and Place of Growth, which may something change its Form and Goodness; others will have it to be the longer and slender Part of the *Indian*, because it is very like in Colour, Form and Virtue to the true *Rhubarb*; but not of so solid and firm a Substance as the true, which is bitter in Taste, and of an aromack Smell, being astringent, and corroborating after Purgings. This comes from *Russia* and *Muscovy*; as also from the Straights out of *Pontus* and *Turkey*. It is of a fresh Colour, inclining to yellow and red, but that is the best which comes nearest to the true *Rhubarb*, which is the Mark of Distinction you ought to chuse it by. The Virtues and Preparations are the same as the former, only this will admit of near a double Dose to the other.

Of Bastard Rhubarb.

There are four several Kinds of this; 1st, *Hip-palapatum rotundifolium*, or *Bastard Rhubarb*,

which is the great common round leafed Dock, whose Root is greater than the *Patientia* or *Monks Rhubarb*, and without many Branches or Fibres thereat, yellow on the Outside, and somewhat a pale yellow within, with some discolour'd Veins therein, like to the true *Rhubarb*, but much less than it, especially when dry, it then quite losing its fresh Colour, which the true always holdeth. 2^{dly}, *Rhabarbarum Monachorum*, *Patientia*, *Monks Rhubarb*, or *Patientia*; this is the great Garden Dock, bearing the Name of *Rhubarb* for some purging Quality therein; the Root is long, large and yellow, like the wild Dock, but a little redder, and when dried, shews a lesser Stock of discolour'd Veins than the former.

3^{dly}, *Rhabarbarum Americanum*, or *Rhamericum*, *West Indian Rhubarb*. This is called by them *Rhubarb*, being very like to the *East Indian* Kind, 'tis roundish, brownish on the Outside, and reddish within, which being broke, has some Whiteness mix'd with it; and being chew'd colours the Spittle yellow, like Saffron, and is bitterish withal. The *Bastard Rhubarb* has almost worn out the Use of the *Monks Rhubarb*, it is now grown so common and plentiful; and it is indeed much the better of the two, though their Natures and Properties are much the same; the *Bastard Rhubarb* works more effectually, a Decoction thereof, or Infusion in Vinegar, eases Pains in the Ear, gargling with it relieves the Tooth-ach, and the internal Use of it is good in the Jaundice, King's-Evil, to provoke Urine, expel Sand and Gravel, open Obstructions of the Spleen and Liver, and cure Fluxes of all sorts. Note, this *Rhubarb* is to be used in double the Quantity to the true *Indian*. 4^{thly}, *Rhabarbarum Album*, or *Macboacan*, of which I shall treat in its proper Place.

[The Plant which affords us the true *Rhubarb*, has been but lately known, and is the *Lappatum Bardana folia undulato Glabro, pro Rhabarbaro vero missum*. Rand. We have two Sorts of *Rhubarb* common in the Shops; the one *Oriental*, brought from *China*, which is heavy, and mark'd with yellow and reddish Veins, of a bitter astringent Taste, an agreeable Smell, and a bright yellow Colour, and which when wetted stains the Hands with a Saffron Colour: This is esteem'd the most excellent. The other is brought from *Muscovy*; it is heavy and of a duskier yellow, tho' of late that of *Muscovy* has been better cured, and much imported.

[*Rhubarb* was unknown to *Dioscorides* and *Galen*, and it is an Error to confound the *Rheum* of those Authors with our *Rhubarb*; for it had a less purgative Virtue, and wanted the nice Characteristics

characteristics of *Rhubarb*, and was the *Rhaponticum*, which is the Root of the *Rhaponticum Thrasium*. Bocc. Mus. 127. *Rhaponticum folio Lepastri majoris glabro, Rha & Rheum Dioscoridis*. C. B. Pin. 116. This is frequent in the Gardens of the Curious, and flowers in May. The Root is a weaker Purge, but a more powerful Astringent than *Rhubarb*. Nothing has been more disputed among Botanists, than whether the *Rhaponticum* of the Ancients and our *Rhubarb* are not the same: But it is very evident that this Plant is the true *Rhaponticum* of *Dioscorides*, and that it is altogether different from our *Rhubarb*.]

5. Of Jalap.

JALAP is a grey resinous Root of a Plant of four or five Feet high, the Leaves of which nearly resemble those of the *Ivy*, but that they are not so thick; the Seed is of the Bigness of a small Pea, of a blackish Colour and not unlike the *Myrtle Berry*, but that it is not so large: According to what the *Sieur Rousseau* has written to me, and what I have heard from *Father Plumier*, the *Jalap* we sell is the Root of this Plant, which is of late brought us from *New Spain*, and which *Mr. Tournefort* has nam'd *Solanum Mexicanum magna Flore, Semine rugoso, Jalap existimatum*, which signifies the *Nightshade of America*, with the large Flower and wrinkled Seed, which is believed to be the *Jalap*.

Father Plumier will have the said *Nightshade* to be a *Belle de Nuit*, because it entirely resembles our Species of *Belle de Nuit*, which we call in *Latin Mirabilis Peruviana*. This Plant is very common in our Gardens, and describ'd by *Mr. Evelyn* by the same Name, and because it only flowers in the Night it is call'd *Belle de Nuit*, or the Beauty of the Night..

We ought to chuse the *Jalap* in large Slices, such as will hardly be broke by one's Hands, but easily by a Hammer; of a blackish Grey without, and of a shining Black within, resinous, of an acrid Taste, and take Care that it is not mix'd with *Bryony* Roots or the like. It contains a great deal of Oil and Salt.

The *Jalap* sold in the Shops is brought from the *West-Indies*, but great Quantities of it come from the *Madeiras*, where it grows very common, without Culture. It is reckon'd an excellent Purger of serous and watry Humours, but must be given with Caution, according to the Age and Strength of the Patient, because it works very vigorously, if given in Substance; the ordinary Dose is from a Scruple to a Dram; but that is too large a Quantity for *English* Constitutions; for if it be good it will operate sufficiently from half a Scruple

to two Scruples, which will answer in the strongest Constitutions.

The Resin or Magistery of *Jalap* is made with Spirit of Wine, and precipitated with Water: It is a liquid Resin, white and gluey, almost like Turpentine, which, after it is dried in the Shade, looks like common Resin. It has a Smell like *Scammony*, and, if rightly prepar'd, when thoroughly dry, is transparent, and so brittle that it will crumble betwixt the Fingers. This is more valuable than the *Jalap* itself, by reason it is much more efficacious, and can be easier administer'd. The Dose is about five or six Grains, either by itself taken in the Yolk of an Egg, or added in Bolus, Pille, or the like, to make other Physick work quicker and brisker. After the Resin, you may make an Extract, (by pouring on fresh Spirits of Wine) which will be of a brown Colour, and of the Consistence of Honey: This has the same Effect with the former, but in a less Degree.

Jalap, Jalapium, Gialapa, Gelapa, &c. is a grey Root, full of Resin, *Lamery*, which is brought from the *West-Indies*, cut into thin Slices and dried. The Plant which grows from it when in the Ground is, according to *Father Plumier* and *Monfieur Tournefort*, a species of the *Belle de Nuit*, which the latter calls *Jalap officinarum fructu rugoso*, the *Jalap* of the Shops with the wrinkled Fruit. The Stalk grows four or five Feet high; the Leaves are very like those of *Ivy*, but they are not so thick; the Flower is red as Scarlet, and sometimes changes to yellow and white, very agreeable to the Eye. This Flower blows in the Night, and closes again at the Approach of the Sun, and therefore is call'd *Belle de Nuit*, or the Night Beauty. It purges all Humours very well, but chiefly the watry, and therefore is useful in Dropsies, Gout, Rheumatisms, and for Obstructions. All the Names belonging to this Root are taken from the *Indians*. There are two Sorts of this *Jalap*, to wit, a whitish, and a blackish or dark brown, which being broke shines a little. This blackish Sort is much to be preferr'd, being more resinous, and heavier than the other; the whitish has little Resin in it, and therefore not so good, and still less so, if worm-eaten. It was unknown to the Ancients, it not being long since we had it from the *West-Indies*.

[*Jalap* is the Root of the *Convolvulus Americanus Jalapium dictus*. R. Hist. 1. 724. *Bryonia Mechoatana nigricans*. C. B. Pin. It was unknown in *Europe* 'till since the Discovery of *America*. It is one of the best Purgatives we now have. The Resin must be given in very small Doses, from five to twelve Grains at most; and even

even in such, if not well dissolv'd, it sticks to the Folds of the Intestines and raises great Heats and Disorders.]

6. Of Mechoacan.

Mechoacan, likewise call'd *white Rhubarb*, *Scammony*, or *Briony of America*, is a light Root, white both on the Outside and within, which is brought to us in Pieces from the Province of *Mechoacan* in *New Spain*, from which it takes its Name. There is likewise a great deal of *Mechoacan*, according to the *Sieur Rousseau*, in the Island of *St. Domingo*, inasmuch that a Ship might be loaded with it from thence in a little Time. This Root, when in the Earth, sends forth Stalks that bear small Leaves like a Heart, of a whitish green, among which grow little Berries, which are green at first, and turn red by Degrees as they ripen. The *Mechoacan* is a winding Creeper, and differs little from *Briony*, only in the Figure of the Leaves and in Taste. The Root cut and dried cannot be distinguished from that of the *Briony*, but that the *Mechoacan* is of a Taste and Smell that is almost insipid, whereas the *Briony* has an intolerable Bitterness. We chuse the fairest Pieces of the *Mechoacan* that are white within and without, dry and ponderous, of an almost insipid Taste, and throw aside that which is dirty, thin and parch'd, and take Care there be no *Briony* mix'd among it, which is a common Cheat when *Mechoacan* is dear; but may be easily discover'd, in that the *Mechoacan* has its Lines thicker placed together and is of a sweet Taste, whereas the *Briony* is extremely bitter. It contains a great deal of Oil and essential Salt.

The *Mechoacan* being powder'd fine, is a gentle Purgative, and may be given in double the Quantity to *Jalap*. It is one of the best Medicines we have for purging watry Humours, and is to be prefer'd to *Jalap*, because it acts not with that Violence, and therefore may be administer'd both to Old and Young with Safety, in *Cachexia's*, *Scurvies*, *Jaundice*, or *Obstructions*, in Powder, with any proper Liquor, or infus'd in Wine. It is a good Hydragogue, purging watry Humours from all Parts of the Body, chiefly from the Head, Nerves, Breast and Lungs; it prevails against Catarrhs and the Venereal Disease, purges Slime from the Stomach, and is good to be given to Children against the Rickets, Kings-Evil, running Scabs and Scald Heads. You may make a compound Extract of it thus: Take *Mechoacan* three Ounces, Ginger two, white Turbith one, Polypody of the Oak half an Ounce; make a Tincture with Spirit of Wine, after due Digestion,

decent or strain it off clear, and add two Drams of Manna, Spirit of Vitriol five Drops, Oil of Cinnamon three, mix and make an Extract, whereof from half a Scruple to a Scruple is a good Dose.

Mechoacan, or *Rhabarbarum Album Indicum*, is a white light Root, which *Lemery*. we have brought to us, cut in Pieces and dried, from *New Spain*, and other Parts of *America*. This Plant is a Species of the *Winding-Briony*, which *M. Tournefort* calls *Brionia Americana repens folio anguloso*, the creeping *Briony of America*, with a pointed Leaf, which is large, thin and whitish. The Flowers produce small green Berries, which grow redder as they ripen; they contain in them a sharp-pointed Seed, but are of no Use in Physick, nor any other Part but the Root.

[It is the Root of the *Convolvulus Americanus Mechoacan Dicus*. *Tourn. Inst.* 84. *R. Hist.* 1. 723. *Brionia Mechoacana Alba*, *C. B. Pin.* 297. It was in great Esteem among the Antients, particularly in Arthritic Pains; but since the Discovery of *Jalap* it is quite disregarded.]

Of White Briony, or the White Vine.

The *Briony*, or wild Vine, is a Plant which is so well known that it is needless to describe it; besides that, all Botannical Authors mention it, and that there is hardly a Garden or Hedge in the Country but what is full of it. The Root of this Plant is so violent, when fresh, that the Peasants call it the *Mad Nep*, which, if they happen to eat through Inadvertence, it makes them frantic, and sometimes they run the Risque of Death itself: But being dried, it is of some Use in Physick, as it has a Place in some Compositions.

The *Sieur Mathurin Seville*, the most famous Botanist we have had at Paris for many Ages, assur'd me that the true wild Turnep was the *Briony*, and that the Seed which was contain'd in the little dry Berries, was what ought to be put into the Composition of the *Venice-Treacle*. Some believe the *Briony* to be an excellent Remedy to cure the Biting of Serpents, and other venomous Creatures.

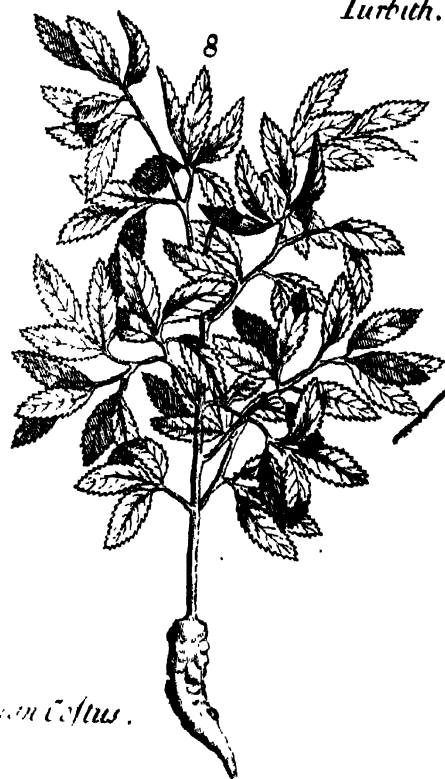
[The Fæculæ of *Briony*, when dried, are like Starch; but as this is found a Medicine of little Use, there is hardly any of it now made.]

Of Black Briony, or the Black Vine.

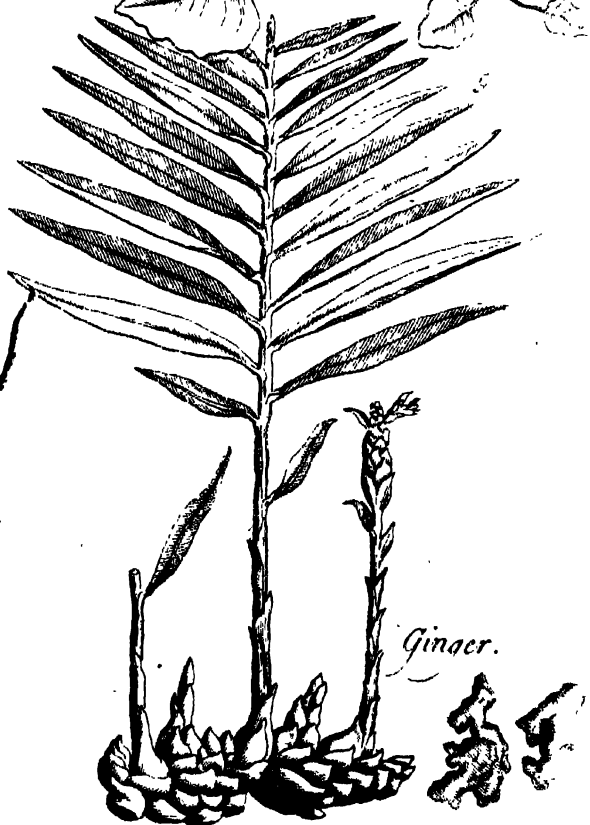
There is yet another kind of *Briony*, call'd the *Black Vine*, to which some have given the Name of our *Lady's Scal*. But as we never sell either of these two Roots, I did not think in requisite to give



Turbith.



Trachium Costus.



Ginger.

give you the Figures of them, and make a long Discourse upon them: But I shall inform you that the Root of this *Black Briony*, apply'd fresh upon Contusions or Wounds, prevents the Blood from coagulating and leaving a livid Spot, from whence it has obtain'd the Name of *Bruise Root*.

[These are the *Brionia Alba* and *Nigra* of almost all Authors; the *White* is never used but as an Ingredient in the *Briany Water*, in which it is reckon'd to assist as a powerful Uterine Detergent: And the *Black*, though certainly a noble Medicine, is, through the Carelessness of enquiring into the Virtues of our own Plants, entirely disregarded.]

7. Of Turbith.

THE *Turbith*, which the Latins call *Turpethum*, is the Root of a Plant creeping upon other Trees: The Leaves and Flowers of it are like those of Marsh-Mallows; according to the Account of many Authors, and particularly *Garicus Aborto*, who says the Stalk runs upon the Ground after the Manner of Ivy; that the Leaves and Flowers are like those of the Marsh-Mallow, and that the better Part of the Plant is what we call the Stalk; that it has no Taste while fresh, and is found near the Sea, in *Cambaya*, *Surat*, and other Parts of the *East-Indies*.

Dr. Paul Herman says that he has seen it in the Isle of *Ceylon*, and other Parts of the *East-Indies*; that it is a great Creeper; that the Leaves are like the Marsh-Mallow Leaves, but something whiter, and, as it were, thorny; the Flowers are of a pale Red, like in Shape to those of the Bind-weeds, for which Reason he calls it *Convolutulus Indicus alatus maximus folio ibisco nonnihil simile, Turbith officinarum*; which signifies the *Indian Bind-Wood*, with great Leaves like Marsh-Mallows, which is call'd *Turbith* in the Shops. When the Flowers are fallen off, there remains a Pod, in which are contain'd four black Seeds, roundish, of the Bigness of Pepper.

He adds, that this Plant loves moist Ground, adjacent to the Sea, and we may assure ourselves of the Truth of what this Author says, as well because he was upon the Spot himself, as because he is a Man of Probity, and worthy our Confidence. We ought to chuse such as is well clean'd; that is, such as is split in two and has the Heart taken out, difficult to break, grey on the Outside, and greyish within, ponderous, and not rotten, but full of Resin; and reject such as is white, subject to break, and Worm-eaten. Many People use the *Thapsia* for the *Turbith*; but they may be easily enough distinguish'd by what I shall say after-

wards. The Resin of this is made after the same Manner as that of *Jalap*.

Of the White Thapsia.

The white *Thapsia*, or grey *Turbith*, is the Root of a Plant mention'd by several Authors, which has Leaves like the *Fennel*; after which grow Clusters of Flowers, like those of *Dill*, which are yellow, and the Seed large, approaching near to the Seed of *Fennel-Giant*.

This Plant is very little in Use, by reason of its violent Operation; and the Juice or Milk is so sharp, that it will take the Skin off the Face. The Root is seldom used, except by some Apothecaries, who make an ill Use of it instead of the true *Turbith*, though the Difference betwixt them is very considerable; for the *Turbith* is of a Grey, inclinable to Red without, of a white greyish Cast within, very heavy, and hard to break; on the contrary, the *Thapsia* is light, wrinkled, of a silver Grey on the Outside, and of a Taste so biting and hot, that it will blister the Mouth to touch it, especially when new.

Of the Black Thapsia.

There is another Kind of *Thapsia*, to which People have given the Name of the *Black*; but as it is not in Use in Physick I shall not describe it; and only observe, that these two Roots ought, by reason of their great Acrimony, to be placed among the violent Medicines, the Use of which is very dangerous, that Apothecaries and other Persons may take Care how they use this instead of the true *Turbith*.

[Both these Roots are brought from the *Alps* and *Pyrenian Mountains*. They must be chosen new and well fed, and such as are not Worm-eaten.]

There are several Sorts of *Turbith*; as, First, the true *Turbith*, call'd *Turpethum Alexandrinum*, and *Verum*, also *Turpethum Arabum*, from the Places where it grows. This is the best Kind, and is brought to us out of *Turky*, being large and gummy. In the Shops are the Bark and Root without the Pith, which is sticky. In the next Place, there is the *Indian*, of which *Pomet* speaks, which is a creeping Kind, and nothing near so good as the former. Thirdly, The *Pseudo-Turpethum*, or false *Turbith*, which is the Root of *Scammony*, by some Men sold for it. Lastly, The *Thapsia Turbith*, call'd *Radix-Thapsia*, which is a little whitish, and not much unlike the white *Dittany* Roots, or smallest *Winter's Bark*, brought to us out of the *East-Indies* and the *Streights*.

The true *Turbith* purges Phlegm and gross clammy Humours, and therefore is profitable in all chronick Diseases, as Gout, Dropsy, Jaundice, Leprosy, and the like: Being given alone, it is apt to cause loathing and vomiting, and therefore is corrected with Ginger, Cardamoms, Grains of Paradise, &c. It is given in Powder from two Scruples to four, but not to Children or Child-bearing Women: In Infusion, from a Dram to three for a Dose, and the Extract may be made like that of *Jalap*. The *Indian Turbith* purges a little, but nothing to be compar'd to the former, and therefore is but little in Use. The *Pseudo-Turpethum*, or *Scammony Turbith*, is a great Root, and in Bigness equal to the great *Briony*, as also in Tenderness; the outward Bark is of a dusky Colour, and it is white within; and the inner Pith being taken out, it seems, in all Mens Judgments to be the same with the best allow'd *Turbith* of the Shops; but herein it differs from the true *Turbith*, for that is more brittle, and will more easily be broken: The Pith also in this *Scammony Root* is no less gummy, and full of milky Juice, than the true *Turpeth*.

The *Thapsia Turbith*, or *Radix Thapsia*, is a thick Root, black without, white within, and full of a milky Juice, of a most bitter, sharp and loathsome Taste and Smell; so that it seems to be possess'd of a poisonous Quality. The *French* take this Root for a Kind of *Turbith*, calling it *Turpethum Cineritium*; but 'tis said that some of them have now left the Use thereof, for that in purging it mightily hurts the principal Parts, causing often cruel Gripings in the Bowels, with Convulsions, and other ill Symptoms. It grows in *Sicily*, *Apulia*, and the Island of *Thapsia*, whence, as some think, came the Name.

Turpeth is the Root of the *Convolvulus, indicus alatus maximus foliis Ibisco non nihil similibus angulosis*. R. Hist. 2. 1882. Horm. Hort. Lygd. Bat. 117.

[*Turpethum Repens foliis albae vel indum.* C. B. Pin. 149. *Turpethum verum seu Album Cleyeri*. It is much of the Nature of *Mecoachan*, but more efficacious, and yields a greater Quantity of Resin. The Dose is from half a Dram to a Dram, in Powder; and from a Dram to half an Ounce, in Infusion; but it is seldom given alone.]

8. Of the Arabian Costus.

THERE are three Kinds of *Costus*, *Pomet.* which are, the *Arabian*, the *Sweet*, and the *Bitter*; but we seldom receive any but the *Arabian*, which is the Root of a Shrub like the *Elder*, which grows plentifully in

Arabia-Felix, from whence it has its Name. Chuse the fairest heavy Roots, of an Ashen Grey without, and inclinable to Red within, not easy to break, of a strong Smell, aromack Taste, together with a little Bitterness. It is aperitive, stomachick and antiscorbutick; taken in Powder from half a Dram to a Dram, and is also used in the *Venice Treacle*.

Of the Sweet Costus.

The *Sweet Costus* is a small Root, very like in Colour, Size and Figure to the *Turmeric*: But since this at present is such a Rarity that it is hardly any where to be found, and the Plant it is the Root of is unknown to us, as well as that of the *Bitter Costus*, I have not here given the Figure of either of them.

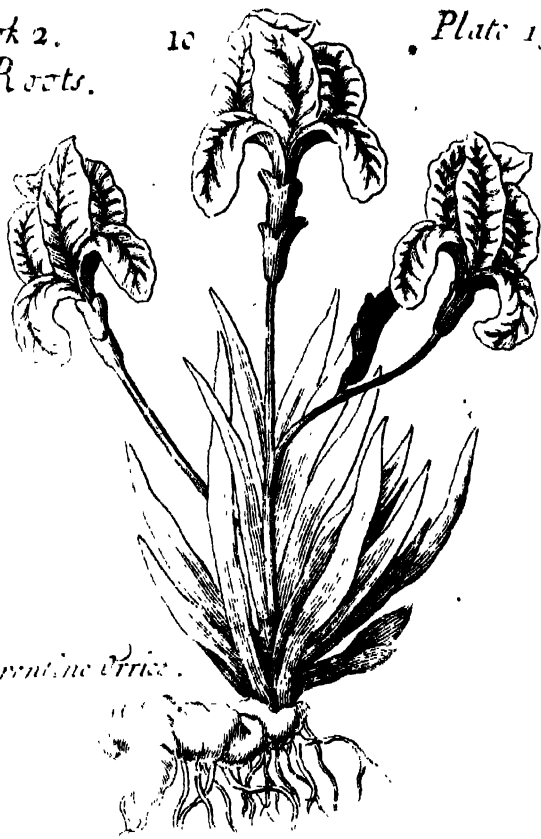
The *Bitter Costus*, which some call by the Name of *Costus Indicus*, is a thick Root, very hard, smooth, shining, and rather looks like a Piece of solid Oak than a Root. This *Costus* is not so scarce as the other aforementioned, being sometimes seen in the old Shops. We have from *Italy* sometimes the Roots of the *Agriocynera* sent us for this; others use in the Place of it the *Cortex Winteranus*, and others *Zedary*, or the Roots of the *Mentha Hortensis Corymbifera*, and others *Elecampene*; but to avoid all these Abuses, we may very well use the *Costus Arabica*, as it is the best of the three, and ought to have only the Name of *Costus*, as we may assure ourselves that the Difference in the Sorts of *Costus* were only occasion'd by the different Places they were brought from, as Mr. *Charas* has very judiciously remark'd, who takes all the *Costuses* to be the Roots of the same Plant, only growing in different Parts of the World; and that it might be that the *Costus* growing in different Parts of the same Country might receive some Difference of Form and Figure, as well as Colour and Taste, according to the Difference of the Earth from which it drew its Nourishment, as we see in Corn, Vines, &c. so that the *Arabian Costus* only ought to be used in all Compositions.

Some are of Opinion there are not two several Species, but only one of this *Costus*, the newest being sweet, and call'd *Costus Dulcis*; the same, when it grows old grows bitter, and then is call'd *Costus Amarus*: that which is good is outwardly of an Ash-colour, inwardly white; and it is fresh, thick, well scented, aromack in Smell and Taste, and not rotten: It is stomachick, hepatick, hysteric, attenuating, aperitive, dissolving, good against the Cholick and Palsy, and most Diseases of the Nerves

Wild Ginaco.



Florentine Iris.



11

Lact. galinosa.



Ginseng
Tide Appendix



Nerves and Womb. Dose in Powder from half a Dram to a Dram, in Tincture from a Dram to two Drams. There is an Electuary made of it call'd *Caryocostinum*, useful for the Intentions aforesaid, and a chymical Oil, which is profitable to be given in Clysters in all uterine Cases.

[It is the Root of *Costus Indicus* *Visla Martis* *Oder.* Herm. Mus. Zeyl. 58. *Tifana Cua*. Hort. Ind. Mal. x. 15. Tab. 8. — Which grows to six or seven Feet high; the Leaves are of a lively Green, but something paler on the under Side than the upper; the Flowers are four-leav'd, white and shap'd like a Bell; the Fruit is three-corner'd, and divided into three Cells, containing a Number of triangular Seeds: The principal Occasion of its being divided into several Species, is, that it is white and sweet while fresh, and contracts a Bitterness in keeping and grows darker colour'd. It evidently is from the Beginning but one and the same Root; for the Description of the *Tifana Cua*, in the Hort. Malab. which, according to *Commeline*, is the true *Ara-bian Costus*, exactly agrees with the Sweet *Costus* of our Shops.]

9. Of Ginger.

Pomct. *G*inger is the Root of a Plant which the Botanists call *Arundo humilis clavata radice acri*; that is to say, the small Club Reed with the sharp Root: It represents in Shape a Sort of Foot at the End of every Root, for which Reason the Inhabitants of *St. Christopher's*, and the other Leeward Islands, have call'd it *Patte in French*, which signifies a Paw or Foot, or *Gingembre*. It produces several Reeds, bearing large long green Leaves, and afterwards a reddish Flower, mix'd with a little Green, the whole Head of the Flower resembling a Club; from whence it is call'd *Ginger with the Club Flower*.

This Root was brought to us heretofore from the *East-Indies*, but that which is cultivated in the *Western Islands* is more used, and much better, because they dry it with more Care, so that it is not parch'd and wither'd. Chuse such as is new, dry, well fed, not easy to break, of a greyish Colour, (resinous within) and of a hot piquant Taste; and reject that which is soft, spongy, (white within and without) and worm-eaten. *Ginger* is hot and drying; it is used in the *Theriaca* and other Compositions. Great Quantities of it are used by the Hawkers and Chandlers in the Country, who mix it with their Pepper; the *French* reduce it to Powder, and then call it *white Spice*, which serves there for several Uses.

Of Candied Ginger.

The *West-Indians* candy their *Ginger* fresh taken from the Earth; likewise they make a Preserve of it green, as the *East-Indians* do; from whence we have great Quantities of green *Ginger*. The *English, Dutch*, and most of the northern People, make use of this to warm the Stomach, as well as to assist Digestion, and to preserve them from the Scurvy, to which those Nations are very often subject.

There are two Kinds of *Ginger*, the white or mealy, and the hard black; *Lenery*. but the first is reckon'd by much the best. It grows both in the *East and West Indies*, and is very much cultivated at present in the Isles of the *Antilles*; but the greatest Quantities come from the *Leeward Islands, Barbadoes, Nevis, St. Christopher's, &c.* as likewise from *Jamaica* and other Places thereabouts. We have now little out of the *East-Indies*, but what is brought thence is a Confection, call'd *Green Ginger*: It is very warm, attenuating, inciding, aperitive, and highly stomachick and alexipharmack; gives Ease in the Cholick, expels Wind, and is an excellent anti-asthmatick, made into an Electuary with Honey, or its own Syrup: It creates an Appetite, resists Putrefaction, expels the Plague, Poison, and all manner of malignant and pestilential Diseases. It may be used in Powder, grated or pounded, from half a Dram to a Dram, or candied to an Ounce. *Green Ginger*, which they prepare in *India*, is likewise made in *England* and other Parts, after this Manner: Let the fresh Root soak two or three Days in warm Water, keeping it in a *Balneo* all the Time; so it will grow soft and swell; then boil it up, either slit or whole, with refin'd Sugar, to a Syrup. The *candied Ginger* is made by steeping the Roots in warm Water, then cutting them into long Pieces, dry them, after which candy them.

A laxative Confection of *Ginger*, useful for cold Constitutions, to purge off watry and phlegmatick Humours, is made thus: Take *Ginger* two Drams, Cinnamon, Cloves, of each a Dram, Nutmeg, Saffron, Galingal, of each a Scruple, Turbith half a Dram, *Diagridium* three Drams, Sugar four Ounces, mix and make a Confect. Dose from two Drams to half an Ounce. Another Confection to revive and fortify a cold and weak Stomach: Take *Ginger* in Powder six Drams, Cinnamon two Drams, Nutmegs, Cloves, Mace, Saffron, of each a Dram, Pistachia Nuts one Ounce, fine Sugar a Pound, dissolv'd in Rose-water; then mix all and beat it up to a Consistence,

tence, of which take the Quantity of a Wallnut twice a Day.

[The Plant of which this is the Root is the *Iris Latifolia Fibrosa Zingiber dicta flore albo*. Hist. Ox. 2, 350. *Zinziber angustiore folio semina utriusque Indiae Alumna*. Pluk. Alm. 317. The Leaves of this Plant are long, slender and of a pale Green; the Flowers are monopetalous, but divided into four Segments; the Seeds shap'd like a Kidney, and fastned to the Style with very slender Fibres. It is purgative, if taken in any Quantity when fresh dug out of the Earth; when dry it is aromattick and attenuant: It is found excellent in warming the Stomach and keeping the Gout from that Part.]

Of Zerumbeth and Zedoary.

These are two Roots of different Colour and Figure, which come notwithstanding from the same Plant, which has Leaves like those of Ginger, for which Reason some call it *Wild Ginger*. Both these Roots are brought us from the *East-Indies* and the Isle of *St. Lawrence*, where they grow in abundance.

The *Zerumbeth* is the round Part of the Root, which we receive cut in Pieces like *Jalap*. It ought to be grey without and white within, hard to break, not carious, of a warm aromattick Taste; the *Zedoary*, the long Part of the Root, serving as a Foot to the *Zerumbeth*; it ought to be about the Length and Thickness of one's little Finger, of a whitish red Cast without, and white within, well fed, heavy, and not apt to break, not worm-eaten, of a warm aromattick Taste, like that of *Rosemary*. The *Zerumbeth* is of little Use in Physick; on the other hand, the *Zedoary* is esteem'd a good Cordial, and of great Efficacy against all Venom and Contagion.

[This is the Root of the *Zedoaria Zeylarina Camphoram redolens*. Herm. Cat. Hort. Lugd. Bat. 636. *Zedoaria longa seu Zedoaria Officinatum*. Com. Cat. Hort. Amst. 371. *Muthiolus* thinks the *Zedoary* of *Avicenna* to be the *Anthora* of the Moderns; and *Dodonæus* takes the *Officinal Zedoary* to be the *Zerumbeth* of *Avicenna* and *Serapion*. The Ancients had many Compositions of this Root, which are now rejected.

The *Zedoaria Longa* and *Rosunda*, as we call them, are certainly both the Roots of the same Plant; but the *Zerumbeth* is a distinct Thing, the Root of a different Plant, the *Zinziber Latifolium Sylvestre*. Herm. Cat. 636. Kua Hort. Malab. xi. 13. Tab. 7. It grows in *Malabar*; but the round *Zedoary* being confounded with it, makes it never seen in our Shops.]

10. Of Florentine Orrice.

Florentine Orrice is the Root of a Plant, whose Leaves are long, narrow, and of a fine beautiful Green; after which grow white Flowers, as I have been assur'd by Mr. *Morin*, Physician to Madam the Dutchess of *Guise*, a Man of great Probity and large Experience in Simples.

This Plant is known in *France* by the Name of *Flower-Flag*, *Flower de Lys*, &c. It grows almost every where by the Walls, Water-sides, and in the Gardens, and is of several Sorts, which many Authors have taken Notice of. And as to the Name *Iris*, they say it was given to them for the various Colours of their Flowers, which in some measure resemble the Rainbow, call'd by some *Iris*; but 'tis a gross Error to say that the *Florentine Iris* is the same with ours, for they are very different. Chuse such of this Root as is large, well fed, of a Piece, clean, white within and without, difficult to break, of a sweet Smell like the *Violet*; but cast by such as is dirty, dry, and of no Smell; likewise such as is soft or worm-eaten.

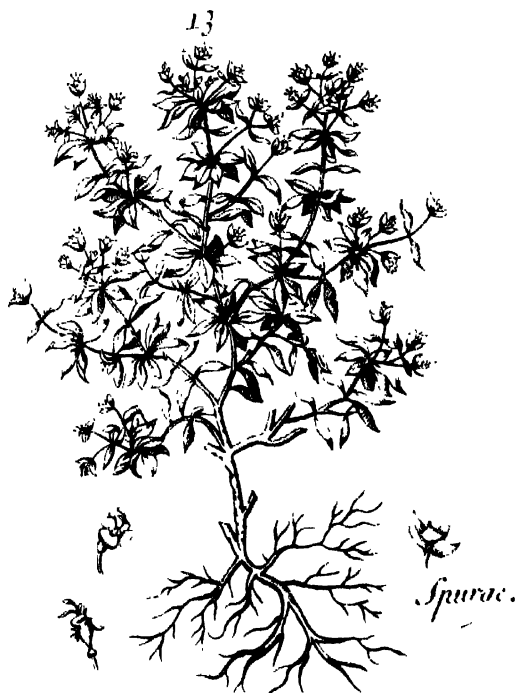
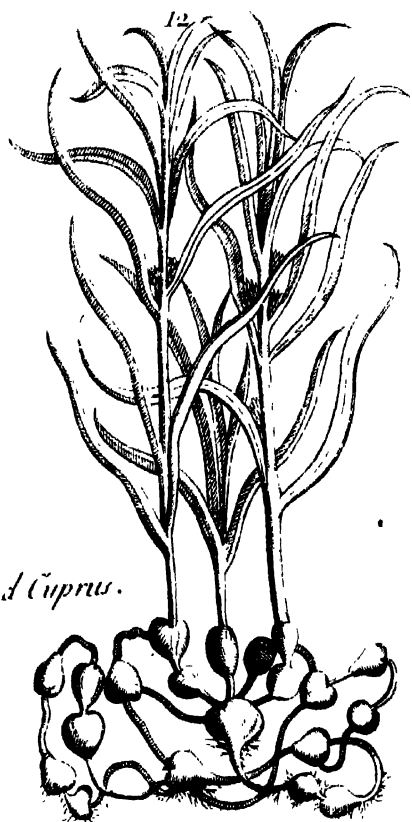
The Dyers, Perfumers and Confectioners use this in their several Trades, to give a grateful Scent to their several Cloths, Perfumes, Comfits and the like. It has a great many other Qualities in Medicine; it is a *Hydragogue*, incitive, aperitive and cephalick: It is employ'd in several *Galenical* Compositions, and is a mighty Favourite with the Fair Sex. There is a green Colour made of our common *Iris*, to which they give the Name of *Verditer*, which is used by the Painters in Miniature. This *Verditer* is made several Ways, as is describ'd in a little Treatise of Miniature, which those who desire to make this, as well as *Carmine*, and other fine Paints, may have recourse to.

This Orrice, call'd *Iris Alba Florentina*, or *Iris major Alba*, *Illyrica vulgo*, *Lemery. vel potius Florentina*, is a white Root, the Thickness of a Thumb, oblong, which is brought to us from *Florence*, where it grows without Culture; the Stalk is like that of the *Flower-de-Luce*, but the Leaves grow erect, and the Flowers are white. This Root, when in the Ground, is deck'd with several Fibres, which are cut off with the Outside, which is reddish, and then it is dried.

The *Illyrick* Sort of Orrice is reckon'd the best, but the Roots of both are used. That brought from *Florence* is plump, round, and of a delicate fragrant Smell, like *Raspberries*. It is pectoral, and very good against Stoppages in the Breast and Lungs,



Book 2.
of Roots.



Lungs, prevails against Coughs, Asthma's, Obstructions of the Terms, Gripings of the Belly, Pain in the Stomach, Wind, stinking Breath. It is used outwardly in sweet Powder for the Hair, and in Damask Powder and Cypress Powder. It may be given in Powder, Tincture, Extract, Species, or the like Form, from a Dram to two Drams.

[This is the Root of the *Iris Flore Albo*. I. B. 11. 719. *Iris Alba Florentina*. Ger. 47. It is a good Medicine to attenuate the Lympha which stuffs up the Bronchia and Glands of the Intestines: It is often join'd with Hydragogues in beginning Dropsies, to scower the Glands of the Mesentery; it is also good in Asthmas, and is an Ingredient in many of our Compositions.]

11. Of Great Galingal.

Pomet. **T**HE great or large *Galingal*, which some call amidst the *Acorus verus*, is the Root of a Plant or Reed, whose Leaves are like the *Orrice*, and which grows plentifully in the Isle of *Java* and in *China*. Make choice of the largest, heaviest Root, reddish without and whitish within, of a warm piquant Taste, and afterwards a little bitter, but throw away that which is almost insipid, which it never is 'till very old. This Root is of no other Use, that I know of, but for the Vinegar-makers, who use it instead of the less Sort for the making of Vinegar.

Of the Small Galingal.

The small *Galingal* is a reddish Root within and without, of a piquant Taste, and very aromatick, which comes to us cut in Pieces from the *Indies* and *China*. This Root bears its Branches almost like a Shrub, and the Leaves much resemble those of *Myrtle*. Chuse such Roots as are best fed, of the highest Colour, and when chew'd of a bitter aromatick Taste; and take care there be no Pieces of the great *Galingal* mix'd, which is easily known, because the small *Galingal* is no thicker than a Man's Little Finger, of a more lively Colour and hotter Taste than the larger *Galingal*. The smaller Sort is much more used in Physick than the greater, because it abounds with more Virtue.

There are two Sorts of *Galingal*, **Lemery.** brought to us from the *Indies*; the first is call'd the Great, and is a solid, heavy Root, cover'd with a reddish Bark, white within, of an acrid, and something bitter Taste. 'Tis a Sort of Species of the Reed, the Leaves like *Orrice*, the Flower white, without Smell, the Seed small, and the Whole of little or no Use in Physick.

The second Sort is the Little *Galingal*, whose Root is about the Thickness of a Finger, cut in Pieces on purpose to dry, that it may be fitted for Sale. It is hard, reddish without and white within, and of a Taste and Smell much stronger and more aromatick than the Large *Galingal*. It is cephalick, stomachick, neurotick, hysterick, and antispasmatick, sharp tasted, attenuating, opening, discussive and prevalent against most Diseases of the Head, Brain, Nerves, Womb, Stomach and Bowels. It is good against Megrim, Head-ach, Palsy, Cramps, Convulsions, Obstructions, Cholick, Indigestions, Want of Appetite, Cachexia, Scurvy, &c. You may use it in Powder, Tincture, Extract, or candied like Ginger.

[These Roots are the *Galanga Major* and *Minor* of all Authors. The Greater grows naturally in *Malabar*, the Smaller in *China*; the Larger is the Root of the *Banchale Indorum* of *Herman*; the Smaller, of the *Lagondi Indorum* of the same Author. The Smaller, which is most in Use, is an admirable Ingredient in Bitters, and in all Compositions that answer the Intentions of a Cordial or Cephalick.]

12. Of Turmeric.

Turmeric, which some call *Curcuma*, and others *Saffron*, or *Cypress* of *India*. **Pomet.** *Malabar*, or *Babylon*, is a Root which is yellow quite through, and produces very large green Leaves; the said Root sends forth Flowers, which grow like Ears of Corn, as may be seen by the Figure, which I have caus'd to be engrav'd from that in *Herman*. This little Root is almost like *Ginger*; It is brought to us from several Parts of *India*, by the Company of Merchants trading thither, and likewise great Quantities of it come from the Isle of *St. Lawrence*.

Chuse your *Turmeric* large, fresh, resinous, hard to break, and the heaviest and least worm-eaten or dusty, or inclinable to be rotten, that you can get. There are a great many Persons about *Paris* who ask for the *Red Turmeric*, as believing there are two Sorts, when in reality it is nothing but the Age of it that turns it brown; when it is powder'd it shews more or less red, according as it is older or newer. This Root is chiefly used by the Dyers, Glovers, and Perfumers: The Founders employ it to tinge their Metals, and the Button-makers to rub their Wood with, when they would make an Imitation of Gold. The *Indians* use it to tinge and give a yellow Colour to their Bread, or other Things, as we do *Saffron*.

[It is the Root of the *Cannacorus Radice Crocea*, *five Curcuma Officinatum*. Tourn. Inf. 367. *Curcuma radice longa*. Herm. Cat. 208. The Leaves of this Plant are like those of the *Cannacorus*, but the Flowers on a separate Stalk, four Leav'd; the Seed-Vessels small, membranaceous, and triapfular, the Seeds round and of a dusky Brown.

There are two Kinds of this Root, as of *Zedoary*, the long and the round, the long is most used in Physick. Its particular Use is in the Jaundice: The Dose is from twelve Grains to half a Dram.]

Of Round Cyprès.

The *Cyprès*, commonly call'd *Round Cyprès*, or *English* or *Flemish Cyprès*, is a Root full of little Knots or Specks, of a brown Colour without, and grey within, of a little Sharpness in Taste, and almost without Smell when it is newly taken out of the Ground. This Root grows in the Water, and along Banks and River Sides, bearing triangular Stalks, solid and smooth; and long upright Leaves; the Flowers are small, reddish, and come by Ears or Tassels on the Top of the Stalks. Make a Decoction of this Root, bruis'd in White Wine, and after it is strain'd, drink the Wine as hot as possible. 'Tis an approv'd Remedy to cure the Cholick.

Of Long Cyprès.

Long Cyprès, call'd by some *Wild Galingal*, is a knotty Root, wrapp'd round with fibrous Strings, not easy to break, of a brown Colour without, and grey within, of a pleasant Scent, especially when fresh, and well dried. This Root grows by Rivulets, and other watry Places, as Ditches, and the like; it bears green Leaves, which are like those of the Leek; the Stalk and Flower very much resemble the round *Cyprès*: It is of Use in Physick, as a Cordial, Diuretick and Cephalick, a Resister of Poisons, and Expeller of Wind: The Dose is from half a Dram to a Dram in Powder, and from two Drams to half an Ounce in Infusion. But it is of much more Use to Perfumers and Glovers.

Terra Merita, or the *Curcunna* of *Lemery*. the Shops is a small Root, about the Size of that of Ginger, hard, as if it was petrified, yellow without and within; it grows in many Parts of the *East-Indies*, from whence it is brought to us dried. The Plant is call'd *Cyperus Indicus*, and *Crocus Indicus*, or *Indian Saffron*. The Leaves are like the White Hellebore, but not so much ribb'd, but smooth. The Flower is of a fine beautiful Purple, which

is succeeded by a Fruit which is hairy, like the Green Chestnut, and which contains a Seed made round like a Pea, which is very good to eat, when it is boil'd with Meat. The Root is yellow, like Saffron, and the *Indians* use it to colour their Rice, and several other Sorts of Provisions: It contains a good deal of Oil in it, as well as fixed and essential Salt. This *Turmeric* is aperitive, deterfive, proper to relieve Obstructions of the Liver and Spleen, to provoke Urine, and Women's Courses, and good in the Yellow Jaundice, Stone and Gravel, either in Powder or Decoction.

Cyperus, in *French Souchet*, in *English Wild Galingal*, is a Plant whereof there are several Kinds; but I shall only speak of two; and first of M. *Tournefort's Cyperus rotundus vulgaris*, or the common Sort, which is call'd the round Sort, whose Leaves are long, with the three corner'd Stalk, and Flowers on the Top like a Plume or Noddy; after the Flowers are gone, on the Head of every Stem, comes a triangular, hard, black Seed: The Root is as thick as an Olive, of an oblong Figure, grey Colour, weak Smell, sweet Taste, and a little astringement.

The second Kind is by M. *Tournefort* call'd *Cyperus odoratus radice longa*, *five Cyperus Officinatum*: The sweet-scented *Cyperus* with the long Root, or that of the Shops. It bears Leaves like those of the Reed, and resembling in some Manner the Leek, but much longer, much slenderer, much harder: The Stalk grows two Feet high, strait without Knots, triangular, full of white Pith, bearing on their Tops large reddish Clusters, with a Seed like the former Sort, as the Virtues are in like Manner: Both long and round, being used to one and the same End and Intentions; the round is esteem'd the best, but some think the long to be full as good. They cure a stinking Breath, being chewed in the Mouth; boil'd in Oil, and bruised, laid to the Reins or Groin, they provoke Urine; they are stomachick, hepatick, uterine, and nephritick; help a weak Stomach, cause a good Appetite and Digestion, expel Wind in the Bowels, and corroborate all the internal Parts; may be given in Powder, Tincture or Decoction. Dose from half a Dram to a Dram.

[These are the Roots of the *Cyperus longus* and *rotundus* of most Authors. The long is of our own Growth, tho' not very common; the round we have from the *East-Indies*, instead of which sometimes the Roots of the *Cyperus rotundus nostras* & *vulgaris*. C. B. Pin. are used, but they are less aromatick, and of less Efficacy; they are recommended as good in nervous Cases, but are but little used at Present.]

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of Roots.



13. Of Spurge.

Pomet. **ESULA** or *Spurge* is the Bark of a small red Root, which produces narrow green Leaves, full of Milk. This Plant grows every where in France neglected, and the Roots which are sold come from Provence or Languedoc. Chuse such as is new, the fairest red Root without and within; which being held in the Mouth, affords a very disagreeable Taste, attended with great Acrimony. This small Root is very little used in Physick; but there is an Extract made of it which is appropriated to hydropick Cases.

The *Esula* or *Spurge*, is a Kind of *Lemery*. *Tithymal*, or a Plant which bears many Stems, of about a Foot high, carrying straight narrow Leaves, like those of the Pine, fill'd with Milk; the Flowers are small and grassy, the Root little and red. This grows in Fields, Lanes or Gardens, and abounds with an essential, fix'd, acrid Salt, as well as Oil. 'Tis rarely used in Medicine, because it purges violently, except in some desperate Cases, as Dropsies, Lethargies, Phrenies, &c. There are several Sorts of this Plant, all which have the like Qualities, but that which bears Leaves like the Pine is esteem'd the best. It is a sharp, fiery, corroding Medicine, and reckon'd so dangerous as not to be used without correcting, which is chiefly done by steeping it in Vinegar, or by adding *Ballium*, *Tragacanth*, or Mucilage of Fleabane-Seed to it. There is the greater and less Sort, both which grow in most Parts of Europe. They purge Phlegm downwards, for which they have been accounted wonderful Secrets in some deplorable and suppos'd incurable Cases. There is an Extract to be made of it, which some have used as a Kind of *Pachymaggon*, or general Purger.

[This is the Root of the *Esula Rivini* & *Offinarum Ray Tithymalus foliis Pini forte Dioscoridis Pityusa*. Tourn. Inst. 86. It is cultivated in the Gardens of the curious, but is grown quite out of Use as a Medicine.]

Of Cinquefoil, or Fiveleav'd-Grass.

The Root foregoing has given me *Pomet.* occasion to mention another Root, in Figure and Colour very like the *Spurge*, which the Greeks call *Pentaphyllum*, the Latins *Quinquefolium*, and we *Cinquefoil*, by reason this small Root produces its Leaves by five and five on a Stem.

It is very common on the Banks of Ditches, and by Way-sides. It is very little used in Medi-

cine, and would not have been mention'd here but as it is an Ingredient in the *Theriaca Andromachi*.

Cinquefoil is so well known it needs no Description. It grows in sandy *Lemery*. Places, in Fields and Hedges, and flowers in May and June. The Root, which is dry, binding, and antiseptic, is used in the Shops, and given from a Dram to two Drams in Powder, in all Respects as you give the Cortex, to cure Quotidian, Tertian, and Quartan Agues. It stops Fluxes of the Bowels, Catarrhs, or Desfluxions upon the Lungs, Coughs, Colds, Gout, Whites or Gonorrhoea in Men and Women, Sharpness of Urine, &c. An Infusion of it in White Wine, is profitable for the Rickets in Children, Obstructions in young People, either of the Spleen, Liver, or Menstrues, and to cure the Jaundice. Dose four or six Ounces; it may be likewise taken like an Infusion of the Bark, and to the same Purpose.

[It is the Root of the *Pentaphyllum vulgatifolium*. Park. 398. *Quinquefolium vulgare*. Ger. It is very common, and Flowers in June and July. *Schroder* runs through most Chronical Distempers in its Commendation; but the present Practice entirely neglects it.]

14. Of Spurge Flax.

Spurge Flax, which is call'd *Thymelaea*, is a light Root, of a different *Pomet.* Thickness and Length, reddish without, and whitish within, woody and fibrous; of a sweet Taste at first, but after it has been chew'd in the Mouth a little Time it is caustick, and burns like Fire, especially when it is fresh.

This Plant produces green Leaves, thick and clammy, in Shape like those of Flax, with Fruit of the Size of Pepper, green at first, and of a beautiful Red when ripe, which the Latins call *Coccus Gnidius*, or *Granum Gnidium*, the Scarlet Berry. The whole Plant is very little in Use, except the Root, which is put into the Bottom of the Ear, which must be bor'd for that Purpose, to draw sharp Humours from the Head which fall on the Eyes. That which comes from *Languedoc* is to be preferr'd to that brought from *Burgundy*.

It is be chosen new, well fed, and the least worm-eaten that may be.

The *Thymelaea foliis lini*, of Monsieur *Tournefort*, or *Thymelen*, with Linseed *Lemery*. Leaves, is a little Shrub whose Trunk is about the Thickness of a Thumb, divided into several Twigs or Branches of about a Foot and a half high, with fine small Leaves, like those of Linseed,

Lanced, but larger, greener, and more viscous; the Flowers grow on the Tops of the Branches, collected together in several little white Clusters: After that comes a round fleshy Berry, like that of Myrtle, full of Juice, which is red when ripe, and call'd *Granum Gnidium*. This Fruit contains an oblong Seed, cover'd with a black shining Skin, very brittle, having a white Pith, of a hot fiery Taste. The Root is long, thick, hard, woody, grey, or reddish on the Outside, white within, sweetish at first tasting, but very caustick and biting afterwards, abounding with a great deal of acrid Salt, and fix'd Oil.

[This is the *Thymelæa monspeliaca*. I. B. 591. *Thymelæa foliis Lini*. C. B. Pin. 463. It is cultivated in the Gardens of the curious. The Fruit of this Plant is now universally allow'd to be the *Granum Gnidium* of the Shops, though *Cordus* and *Schroder* have both affirm'd that the *Grana Gnidia* are the Berries of the Mezereon; but the Dispute is not of Consequence enough to be worth enquiring into here, as both the one and the other are now altogether out of Use.]

Of the *Pareira Brava*.

The *Pareira Brava*, which the *Indians* call *Botua*, is a Root we have of late Years receiv'd from *Brazil*. It is in Figure very like the Root of the *Thymelæa*, but that it is blacker and closer in its Texture: While it is in the Earth it sends up Branches like those of the Vine.

It must be chosen fresh, such as is truly from *Brazil*, and not adulterated nor worm-eaten. The first who brought it to *Paris* was Monsieur *Amelot*, Ambassador in *Portugal*, and after him *M. Tournefort*, who gave me a Piece, the Figure whereof is here represented.

M. Amelot, *M. Thevard*, of the Faculty of Physick, and some others, have recommended it as a Specifick for the Cure of the Stone, to be taken in Powder in a Morning fasting, in White-Wine. For Choice of this, *M. Thevard* thinks that of *Mexico* to be much better than that which comes from *Portugal*: And in a Letter which I receiv'd from *Lisbon* the 16th of *October*, 1692, it is observ'd, "That the *Pareira Brava*, which comes from the *Indies* and *Brazil*, is a Root so common, that almost all the Apothecaries there keep it, but not many in great Quantities. It is sold at ten Testons, which is about five *Livres French Money*, a Pound.

[This is the Root of the *Convolvulus Brasiliensis flore testra petalo monoccois*. Rai. Hist. 2. 1331. *Pareira*, *Ambutua*, *Butua*, *overa Brutua*. Ind. Med. 89. This Root is brought to us in

Pieces of different Sizes; the Bark is brown and rough, when cut the inner Fibres appear circular: The Taste is sweetish, with a Mixture of Bitterness. It is said to grow in *Brazil*, because we have it from the *Portuguese*; but it has been sent also from the Coast of *Malabar*. It is unquestionably a noble Medicine in the Nephritick Cholick. It seems to act by dissolving the slimy Matter contain'd in the Kidneys and Bladder; it is also good in Hepatick Cholicks, arising from an Obstruction of the Orifice of the Gall Bladder. The *Portuguese* esteem it as an Antidote and Alexipharmick, and use it powder'd for Quinceys, and Diseases of the Thorax.]

[There is another Species of it, call'd *White Pareira Brava*, harder than the former, and yellowish within; said also to come from *Brazil*, but it has never yet been used.]

15. Of White Hellebore.

WHITE Hellebore, call'd in *Latin* *Veratrum Album*, is a Plant which *Pomet.* grows on the Mountains of *Dauphine* and *Burgundy*, whose Root is white, with many long fibrous Strings of the same Colour; the Leaves of the Plant are large, green at first, and of a yellowish Red afterwards, the Stalks, which are hollow, bear a great many little Flowers like Stars. We ought to chuse such Roots as are fairest, full of Filaments or Fibres, yellow without, and white within, of an acrid ungrateful Taste; some value those Roots which are cleansed from the Fibres, which I do not disapprove, especially when it is to be powder'd.

Of Black Hellebore.

This is a dark, brown Root, full of small Fibres, black on the Surface, and grey within, from whence arise green Stalks, adorn'd with Leaves of the same Colour, indented, and Carnation colour'd Flowers like a Rose. Make your Choice as before directed: This is of much greater Use for internal Medicine than the last. This is brought us from the *Alps* and from the hot Countries.

The *Veratrum flore subviridi*, of *Tournefort*, or the *White Hellebore*, *Lemery.* rises on a Stalk of two or three Feet high, round, straight, hollow, surrounded at the Bottom with abundance of Leaves like *Gentian*, but much larger, more stringy, striped and plaited lengthways, soft and a little hairy; the Leaves, which are pretty high on the Stalk, are at a great Distance from one another. The Flowers grow on the Top, rang'd like long Ears, of a whitish green



green Colour, each of which is compos'd of several Leaves, disposed like a Rose, to which a Fruit succeeds, in which are contain'd longish white Seeds, almost like Corn. The Root is a thick, white Head, furnish'd with a great many long Fibres of the same Colour.

The other Sort is the *Hellebore*, call'd by *M. Tournefort*, *Veratrum flore atro rubente*; it differs from the former, in that the Leaves are much narrower, folding about the Stalks, and that the Flowers are of a brown, or dark red Colour. Both one and the other Kind grow in mountainous and wild Places, especially in the hot Countries. No Part is used in Physick but the Root, which is brought dried from *Dauphine* or *Burgundy*; it contains a deal of volatile Salt and essential Oil in it.

The *Black* as well as *White Hellebore*, purges upwards and downwards, and is said to cure all Diseases proceeding from Melancholy, as Disaffections from the *Hypochondria*, *Elephantiasis*, *Herpes*, *Cancers*, *Quartans*, and all Diseases of the Head and Brain, as Epilepsies, Apoplexies, Lethargies, and Madness, for which all Authors have held it a Specifick. It enters into the Composition of *Matthews's* excellent Pill, and may be given in Powder, alone, to a Scruple: It likewise mixes well with the larger purgative Compositions.

[These are the Roots of the *Helleborus albus* and *niger*, of most Authors. They are both common in the Gardens of the Curious.

The *White* is used as a Sternutatory, and mix'd in Ointments to cure the Itch: It is never now given inwardly; *Boerhaave* very justly observed, That it is a Medicine much fitter for Horses than for Men.

The *Black* has been in great Esteem among the Antients in the most obstinate Chronic Cases. It does not operate much by Stool, but is a powerful Alterative: It almost infallible in Obstructions of the Menfes, and may be often given in such Cases where Steel cannot without Danger; for tho' Steel and the *Hellebore* both promote the Menfes, they do it different Ways; one by increasing the Blood's Velocity and giving it a greater Momentum in the Uterine Arteries, and the other by dividing it and rendering it more fluid.]

16. Of Roman Wolfsbane.

Pomet. **T**HE *Doronicum Romanum*, which we call *Roman Wolfsbane*, is a little Root, yellow without and white within, of a sweetish astringent Taste, attended with a little Viscosity. We have this Root brought to us cleansed from its Strings, from the

Mountains of *Switzerland*, *Germany*, *Provence* and *Languedoc*: The Root, when it grows, is of the Figure of a Scorpion's Tail, from whence arise large Leaves, something resembling will Cucumber, or Plantain; this is the Reason why it is call'd *Aconitum pardalianthes Plantaginis folio*, or *Panther's-bane* with the Plantain-leaf. Chuse the fairest Root, and not such as is inclinable to be worm-eaten, well tasted, and when bruised, of a good white Colour: It is believ'd that this being chew'd in the Mouth, becomes an Antidote for Men, tho', on the contrary, it is a mortal Poison to all Quadrupeds. It is cephalick, cordial and alexipharmack, resists Poison, is good against the biting of venomous Creatures, and cures the Palpitation of the Heart.

The *Doronicum Romanum* of *Gesner*, or that which *Tournefort* calls the *Doronicum radice Scorpis*, the *Wolf's-bane* with the *Scorpion Root*, is a Plant which bears large Leaves, Swallow-tail'd, green, woolly, and very like the Cucumber, but much less and softer; the Stalk is above a Foot high, something lanuginous, round, divided at the Top into several small Branches, which bear yellow radiant Flowers, like those of the *Chrysanthemum*, or *Sun-flower*; those are succeeded by little, thin black Seeds, each one having a spiral Head; every Root resembling a Scorpion. This Plant grows on the Mountains of *Switzerland*, near *Geneva*, and in several Parts of *France*, *Germany*, &c. from whence these Roots are brought dried to us. It is a proper Counter-poison, good to fortify the Spirits, and drive away malignant Diseases by Perspiration, and to expel Wind, in hypochondriack, cholicky Disaffections.

[This is the Root of the *Doronicum minus officinarum*. Ger. 630. *Aconitum Pardalianthes*. Mont. 35. It is kept in the Gardens of the Curious, and flowers in *July*. It is said to be an Alexipharmack, &c. but is never used in the present Practice; nor indeed is it should be till we are more certain of its Effects; some Authors calling it a Good Medicine, and others a Poison, which indeed is the most probable. The *Doronicum Plantaginis folio*, is another Species, call'd also the *Doronicum minus off.* but as neither are very likely to be used, the Distinction is of no Consequence here.]

17. Of the Greater Thora, or Panthers-Bane.

THIS is a Kind of Plant which grows no where but on the high Mountains, and is call'd *Thora Major*,
G

Wolf or Panicker-Bane: It is a Root divided into Lumps, or Clods, like the *Ranunculus*. The Leaves are almost round, indented about, and supported by tender Pedicles; the Stalks are not above seven or eight Inches high, branched at top, and adorn'd with certain yellow Flowers, composed of four Leaves, among which stands a small Cluster of Seeds, like those of the *Ranunculus*; and when the Flower is gone the Seeds grow to the Shape of those of the common *Ranunculus*. The Juice of this Plant is used to poison Flesh with, for the Destruction of the Wolf, the Fox, and other ravenous Beasts.

This Plant is call'd *Thora*, which signifies Corruption, because it is venomous: According to *Tournefort*, it is the *Ranunculus Cyclaminis Folio, Asphodeli radice*. This is a Kind of *Ranunculus*, or a Plant which from the Root produces two or three Leaves that are almost round, like those of the *Cyclamen*, but near as big again, indented on the Sides, fibrous, tied by Stalks, which bear them about half a Foot high, or more: The Flowers grow on the Top like a Rose; the Seed is Swallow-tail'd and flat; the Root is like the *Asphodel*, and yields a great deal of acrid corrosive Salt and Oil.

[This is the Root of the *Thora Valdensis*. Ger. Emac. 966. *Thora folio Cyclaminis*. J. B. 3. 650. It is kept in the Gardens of the Curious, but is not used in Physick, being esteem'd a Poison.]

Of the Anthora, or Healing Wolfs-bane.

The *Anthora*, according to Monsieur *Pomet*. *Tournefort*, is a Species of the *Aconite*, though this is a Counter-poison to such as eat the Root of the poisonous *Aconite*, or deadly *Wolfs-bane*. It is for this Reason *Baubinus* calls it *Aconitum Salutiferum*, the *Healing Aconite*, or *Anthora*. The Root is composed of two short wedge-like Roots, very bitter, white and fleshy within, but brown on the Outside, and deck'd with abundance of Fibres. The Stalk arises about two Feet high, surrounded with Leaves resembling those of the *Larkspur*; the Flowers grow about the Stalk like an Ear of Corn, they are yellowish, and like a Head cover'd with a Helmet; the Seeds are black, wrinkled, and grow in Sheaths, or membranous Cells, five or six of them together. The Root of this is a good Antidote: The Peasants who gather this on the *Alps* and *Pyrennees*, use it with Success against the biting of mad Dogs, and to cure the Cholick; they take it for a sovereign Remedy for those who eat the *Thora*, or deadly *Aconite*.

The *Aconitum Salutiferum*, is call'd *Anthora, quasi Antiithora*; because this *Lemery*. is reckon'd a Counter-poison to that call'd the *Thora*, which is a Sort of *Ranunculus*, or *Crowfoot*. This *Anthora* is of the Species of the *Aconite*, or deadly *Wolfs-bane*, as described fully before by *Pomet*. The Root is useful in Physick, as being alexipharmack, cardiack, stomachick, and good against the Wind-Cholick: It contains a great deal of volatile Salt and essential Oil.

[This is the Root of the *Anthora sive Aconitum Salutiferum*. Ger. 820. *Antiithora flore luteo acniti*. I. B. 3. 660. It is cultivated in the Gardens of the Curious, and flowers in June. The Root is of a dusky Brown without and whitish within, of an acrid Taste and unpleasant Smell; it is accounted a Cardiack and Resister of Poison, and is an Ingredient in the famous *Orvietan*, and is thought to have the same Virtues with the *Contrayerva*; but is at present very little used.

18. Of Angelica.

Angelica is a Plant which grows plentifully in *Bohemia, Spain, Italy, Pomet. France, England*, and most Parts of *Europe*, and is so well known, it would be needless to describe it. The Seed is much us'd to make *Angelica Confits*, and the Stalk makes a very good Sweetmeat candied. The Root is seven or eight Inches long, of an odoriferous Smell, and aromattick Taste, flexible, and, if new and fresh, breaks white within. It grows in all our *English* Gardens; yet notwithstanding some is brought us from *Spain and Germany*. Take Care of buying the Roots of *Meum*, or *Spiguel*, which are sometimes offer'd to Sale instead of it to ignorant Persons. It is cordial, bezoartick, and alexipharmack, heats, dries, opens, attenuates, and causes Sweat, resists Poison, and cures the Bitings of venomous Creatures. A Spirit of it clears the Heart, and revives the Spirits to a Miracle. The chymical Oil operates more powerfully than any of the former, to all Intentions. Besides which, it provokes the Terms, expels the Birth, resists Poison, helps Suffocation of the Womb, cures Palsies, Apoplexies, Convulsions, Cramps, and Rheumatisms. It ought to be chosen in fair large Roots of a dusky Colour without, and white within, and not Worm-eaten, of an agreeable aromattick Taste, with a little Bitterness.

This Root, whose Plant is so vulgarly known, grows best in a fat Soil, *Lemery*. where the Ground is full of Moisture. It is brought ready-dried to us from several Parts, but

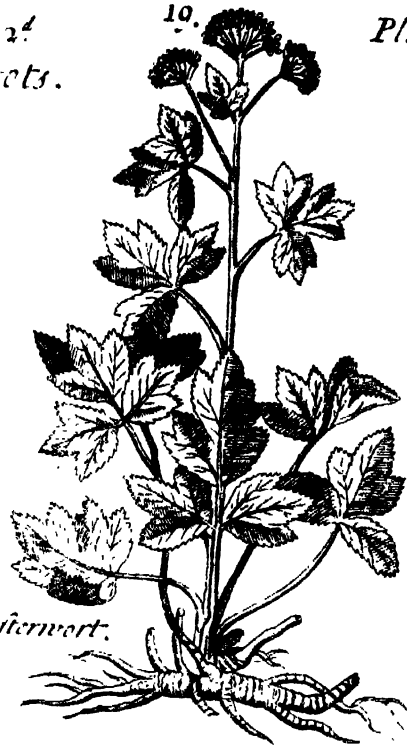


Angelica.

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of Roots.*

10.

Plate 1st.



Masterwort.

20.



white



white

Dittannum.

but the best is that from *Bohemia*, and then what is brought from *England*; of a sweet Smell, and aromatick Taste, that overcomes the bitter, being loaded with a highly exalted Oil and volatile Salt. It is cordial, stomachick, cephalick, aperitive, sudorifick, vulnerary, resists Poison, is us'd in the Plague and malignant Fevers, and for the Biting of mad Dogs.

[This is the Root of the *Angelica Sativa*, of most Authors; it is cultivated in Gardens, and flowers in *June*: It is a warm, fragrant, and aromatick Root, much esteem'd as a Carminative and Cordial, and is an Ingredient in many Compositions.

19. Of Masterwort.

Pomet. *Imperatoria*, *Magistrantia*, or *Masterwort* in *English*, is the Root of a Plant which has large, green, indented Leaves, after which grow Clusters of white Flowers, succeeded by a small Seed, like that of the *Angelica*. Chuse such Roots as are fair and fresh, hard to break, of a brown Colour outwardly, and greenish within, of a strong Smell, and aromatick Taste: Those that grow in *Auvergne*, and other mountainous Parts, are prefer'd to those of the Garden. The same Virtues are ascrib'd to this as to *Angelica*. Its Name of *Imperatoria* was given it partly for its excellent Qualities, and partly because an Emperor made the first discovery of them.

Master-wort, *Imperial-wort*, or the *Lemery*. *Imperatoria major* of *Tournesort*, is a Plant whose Leaves are large, rang'd three and three along the Side of the Stalk, ending in a single Leaf; they are stiff, hard, and divided each into three Parts, indented on one Part lightly, on the other deep. They rise among the Branches all along, which mount about two Foot high, dividing themselves into Wings, which carry upon their Tops Clusters of Flowers of five Leaves form'd into a Rose, succeeded by little Seeds, which are flat and almost oval, little larger than those of *Dill*; streak'd lightly behind, and of a white Colour. The Root is sometimes of the Thickness of one's Thumb, wrinkled, hard, and entangled in Fibres, fill'd with a white, aromatick Substance of an acrid piquant Taste, hot in the Mouth, and a little bitter.

This Root being hot and dry, attenuates, opens, digests, strengthens, is sudorifick and alexipharmack, is us'd against Poisons, malignant and pestilential Diseases; causes Expectoration, cures a stinking Breath; relieves Diseases of the Head, as Vertigoes, Apoplexies, Palsies. A Decoction of it in Wine, us'd as a Gargle, cures the Tooth-

ach, dries up Rheum and Catarrhs, and is good to bathe with in the Gout: A Saline Tincture is much better than the Decoction to cure the Itch, and dry up scabby and scald Heads: An Ointment of it made with Hogs Lard and Turpentine, heals old Sores, Ulcers, and all foul, leprous, and malignant Scabs.

[It is the Root of the *Imperatoria major*, C. B. Pin. 156. *Imperatoria seu Astrantia Vulgaris*, Park. 942. It is a good Medicine in many Cases, particularly Jaundice, Cachexies, and Dropsies; because it promotes the Secretions by Urine, as well as by the Skin, but is not so much us'd in the present Practice as it deserves.

20. Of Gentian.

Gentian is a Plant so called from King *Gentius*, who first discover'd its Virtues. It grows plentifully about *Chabli* in *Burgundy*, and other moist Places in several Parts of *France*, especially about the *Pyrenees* and *Alps*. *Pomet.*

The Root, which is the only Part of the Plant that is sold, is sometimes as thick as one's Arm, divided into several Roots, of a Thumb, or Finger's Thickness, yellowish, and of an intolerable Bitterness; the Leaves in some manner resemble those of Plantain, and grow two and two upon every Joint of the Stalk; they are smooth, green, pale, and ridg'd Lengthways with Nerves, which stand pretty high, particularly on the Underside. The Stalks are strait, strong, of two or three Feet high, deck'd with yellow Flowers in *June*, which are dispos'd in Rings, in the Joinings on of the Leaves. Each Flower is of one Piece, divided into five Parts, very narrow, and sharp pointed: The Style, which is in the Middle, produces a Capsula, in which are enclosed several round Seeds, but very flat, which are ripe in *July*.

Chuse such as is of a middling Size, fresh, well dried, because it wastes considerably in drying, and that which is freeest from small stringy Roots and Dirt; it is much recommended, being powder'd and mix'd with the *Theriaca*, for the Bite of Mad Dogs. Take Care also that it be not dried in an Oven, which you may easily distinguish, because such will be black within; but, on the contrary, that which is dried in the Air, will be of a Gold-colour'd Yellow. This Root is reckon'd useful to resist Poisons and the Plague; and therefore is properly mix'd in the great Compositions: It is sudorifick, and given with Success in Intermittent Fevers; for which it has receiv'd the Name of the *European Kinkina*, the same Name as is given to the *Peruvian*, or *Jesuits Bark*.

This is the *Gentian* describ'd by *Lemery. Ray*, in his History of Plants, call'd *Gentiana vulgaris major Ellebori albi*

Folio: The larger common *Gentian*, with the whole Herb like the Leaf. The Plant is sufficiently describ'd before, the Root is wrinkled when dry'd, and shrink much from its former Size. It grows generally every where in the warm Countries, but more particularly on the Mountains of the *Alps*, the *Pyrenees*, and in *Burgundy*, abounding considerably in Oil and essential Salt. The whole Root is esteem'd better than that which is slit; and it is likewise brought in good Quantities out of *Germany*. It is hot and dry, pectoral, alexipharmick, antiscorbutick; opens Obstructions of the Lungs, resists Poison, and is good against all Diseases proceeding from Putrefaction, as Measles, Small-pox, Plague or Pestilence: It cures the Scurvy, and is beneficial against Cachexies, Dropsies, Jaundice, Ulcers of the Bladder, Sharpness of Urine, &c. May be given either in Tincture, Infusion, Decoction, or Powder. Dose, a Dram of the Powder.

[It is the Root of the *Gentiana major lutea*, C. B. Pin. 187. *Gentiana vulgaris major Ellebori albi Folio*, I. B. 3. 520.—It is cultivated in the Gardens of the Curious, and flowers in *June*. The Root ought to be gather'd in *September*. It is extremely bitter, but leaves rather an agreeable than a nauseous Gust behind it. It deservedly stands at the Head of the Stomachick Class; and is the best Ingredient we know of in Bitters. It is recommended in many other Intentions, but is only used in this in the present Practice.]

21. Of White Dittany.

Pomet. **W**HITE Dittany, or *Fraxinella*, is a Plant whose Roots are white, smaller than the little Finger, something bitterish, of a pretty strong Smell: The Stalks are two Feet high, reddish, with Leaves like the Ash, and charg'd at the Top, with large Flowers in Spikes of a whitish Red mix'd with Purple, compos'd of five Leaves, sharp pointed, and with long crooked Strings or Filaments: In the Middle of which Flower is produced a Head divided into five Capsules, in which grow black shining oval Seeds, pointed at the Ends. Chuse the plumpest Root, white within and without, and least burden'd with small Fibres, and the cleanest that can be had. This Plant flourishes in the Forests of *Provence* and *Languedoc*. The Root is reckon'd alexiterial, uterine, and diuretick: It kills Worms, cures malignant Diseases and Calentures. *Swelfer, Charas*, and most of the modern Authors, substitute the Powder of this Root for the

Farina Orabi, to make the Troches of Squills for the *Venice Treacle*.

[This is the Root of the *Diellamnus albus vulgo five Fraxinella*, C. B. Pin. 222. *Fraxinella vulgaris*, Park. 417. It is cultivated in Gardens, and flowers in *July*. This is, in all Probability, one of the two *Trochus* mention'd by *Dielsorides*, the other of which is a Species of the *Diervas*.

This Root has had many Virtues attributed to it, but at present is only known as an Ingredient in several of our Compositions.]

22. Of the White Carline Thistle.

THE White *Carline*, call'd by some the White *Chamæleon*, or little *Chardon*, is a Plant, the Roots whereof are not much thicker than a Man's Thumb, brown on the Outside, and white within, from one to two Foot long, of a strong Scent, and agreeable Taste enough. The Leaves hang quite round it, lying to the Ground, of a pale Green, wav'd, and deeply indented, on each Side furnish'd with Prickles or little Thorns. The Flower grows like the Leaves, close to the Root, without Stalk, five or six Inches broad, flat, and like a little *Bason*, edg'd with some narrow-pointed Leaves. The Seeds come after the Flowers; they are long, and bear a white Down at the End. Chuse your Root new, well fed, and dry, of a sweet Taste, and aromattick Smell, and take care that no other Root be impos'd upon you instead of this, which is often done, especially when it is dear. It is one of the best Medicines against the Plague, and it is commonly receiv'd in the Catholick Countries that it was discover'd by an Angel to the Emperor *Charlemain*, for the Cure of his Soldiers, who were seiz'd with the Plague in their Camp; from which it took the Name of *Carline*, from *Carolus*.

The black *Carline*, or black *Chamæleon Thistle*, is like that we have describ'd; but that this rises to a Stalk, and the Leaves are of a more obscure Green. *Mathiolus* speaks of another Species, whose Flowers are Purple; but that is a Plant very scarce, and of no Use at all. The Virtues of the ordinary *Carline* are to resist Poison, provoke Sweat, to pass by Urine, and to open Obstructions; they are likewise serviceable in the Plague, Dropsy, Hypochondriack Passions, and the like. This Plant grows in the *Alps* and *Pyrenees*, and the Hills of *Auvergne*. Both the Kinds are so common, that the Peasants eat the Roots and Heads as Artichokes, when they are young and tender.

Carlina, in French *Carline*, or *Chamæleon*, is a Plant, whereof there are two Sorts: The first is called *Carlina*

acaulas

Book 24.
of Roots.



Fine Thistle.



Black cartline Thistle.



Great Valerian.



Small Valerian.

acaules magno flore, the prickly *Carlina* with the large flower: This bears from the Root large jagged Leaves, hanging to the Ground, &c. as before describ'd. When the Flower is past, there succeed oblong Seeds, each of which are furnish'd with a Quantity of white Hairs, which represent a Brush: These Seeds are separated from one another by Leaves folded into a Gutter. The Root shoots direct into the Ground, sometimes two Foot deep, the Thickness of an Inch, of a dark Colour without, white within, of a strong aromatick Smell, and agreeable Taste.

The second Sort of *Carlina* Thistle is the *Chamaeleon niger vulgaris*, the common black *Carlina*. This differs from the former, in that the Head is not so large, nor so much spread. It grows for the most Part only at the Top of the Stalk, which is rais'd among the Leaves about a Foot high. The Flower is commonly white, and very rarely red. The Root is not so big, or half so well fed as the white *Carlina*; and both of them grow in the hilly Countries, as aforesaid. They take the Roots out of the Earth in Spring-time, to dry for keeping, which are afterwards used in Physick. The first Kind is to be preferr'd for that Use, as being fuller of volatile and essential Parts.

[The first of these is the Root of the *Carlina seu Chamaeleon albus Discoloridis*, Ger. 995. *Carlina humilis*, Park. 968. The other of the *Carlina caulescens flore magno albente*, Tourn. Inst. 500. *Carlina caulescens magno flore*, C. B. Pin. 380. The Root of the first is most commended for its Virtues; but the present Practice takes no Notice of either of them.]

23. Of the large Valerian.

THE great or large *Valerian*, which *Pomet.* *Johannes Bauhinus* calls *Valeriana major odorata Radice*, the great *Valerian* with the scented Root, is a Plant, the Roots of which are about an Inch thick, brown on the Outside, wrinkled in Rings deck'd with Fibres on the Sides, of a strong aromatick Smell, and very disagreeable; the Stalk is three Foot high, hollow, strait, and adorn'd at each Joint with two Leaves, opposite to each other; those which rise first from the Root are whole, the others cut on each Side. The Flowers are white, and scented like *Jasmine*; they grow in Clusters on the Tops of the Branches, and are small Pipes, divided into five Parts, which leave behind them flat long Seeds, charg'd with a white hairy Tuft.

The little *Valerian* has small Roots, of a good Smell: The Leaves which grow first are almost round and sharp at the End; the Stalk is a Foot and some Inches high, charg'd at each Joint with

two Leaves, cut in at the Side: Their Flowers are Purple, and resemble those of the great *Valerian*, but they are very small: Their Seed is the same. In Relation to the Choice of these two Roots, take the newest and best dry'd, and least charg'd with Fibres that is possible. They are both us'd as Counter-Poisons, against the Plague, for the Cure of the *Asthma*, *Dropsy*, &c. Some Authors call these Roots by the Name of *Pontick Phu*.

Valeriana, or *Valerian*, is a Plant, of which there are three Sorts us'd in Physick: The first is call'd *Valeriana hortensis*, or *Valeriana major odorata Radice*, by *Bauhinus* and *Ray*; by *Tournefort*, *Valeriana hortensis*, *Phu folio olusatris*. This bears the Stalk three Foot high, slender, round, hollow, and full of Branches, adorn'd from Joint to Joint with two Leave opposites to each other, as before in *Pomet*. The Flowers are white inclinable to Purple, and sweet scented. This Plant, which grows in our Gardens, is the best, and most to be valu'd of any of the *Valerians*.

The second Sort is call'd *Valeriana vulgaris*, or *Valeriana sylvestris major*, by *Tournefort*, the great wild *Valerian*; and by *Ray*, *Valeriana sylvestris magna aquatica*, the great watry wild *Valerian*. This bears the Stalks a Man's Height, strait, slender, and hollow like a Reed, a little hairy. The Leaves are like those of the foregoing Kind, but more divided, greener, indented on their Edges, a little hairy without: The Flowers are disposed as the great *Valerian*, of a whitish Colour, tending to Purple, which are succeeded by Seeds garnish'd with Plumes. The Root is fibrous, white, creeping, of an aromatick Taste and Smell. This Plant grows in wet and woody Grounds.

The third Sort is call'd *Valeriana sylvestris minor*, or *Valeriana minor pratensis sive aquatica*, the small, wild, or water *Valerian*. This bears a Stalk above a Foot high, angular, slender, branch'd, hollow, carrying the Leaves by two and two, jagged towards their Edges. The Flowers and Seed are like the former, but much less; the Roots slender, crawling, and white, having a great many Fibres, of an agreeable aromatick Taste. These are dry'd in the Sun, to be made fit for Use, and are cardiack, sudorifick, vulnerary, aperitive, proper to resist Poison, to fortify the Brain and Stomach, to destroy Worms, provoke the monthly Courses, assist Perspiration, and expel Wind.

[The first of these is the Root of the *Valeriana major hortensis*, Mor. Umb. 52. *Valeriana major odorata radice*, I. B. 3. 209. The second of the *Valeriana minor*, Ger. 916. *Valeriana sylvestris minor*, Park. 122. And the other, mention'd by *Lemery*, of the *Valeriana sylvestris magna Aquatica*, I. B. 3. 209. The first of these is an ingredient

Ingredient in the *Theriaca*, and other Compositions; the other two are little regarded.

But the *Valeriana sylvestris*, now so much and so deservedly in Esteem, is the Root of a Species different from all these, and is much more valuable than them all: The Plant which produces it is the *Valeriana sylvestris major foliis angustioribus*, Mor. Umb.]

24. Of Spignel.

Pomet. *MEUM* or *Spignel*, which the Antients surnam'd *Althamanticum*, from the Hill *Althamas* in *Thessaly*, where the best was said to grow, is a Root of the Thickness of a little Finger, black without, white within, long, and accompanied with a few small Roots, acid, a little bitter, and of an aromatick Smell. The Leaves are like those of Fennel, but much less, more divided, and abundantly finer. The Stalks are a Foot high, charged with some Clusters of white Flowers, compos'd of five small Leaves; after each of which come two brown Seeds, like Fennel Seeds, but bigger and more furrow'd; which has made some believe that *Spignel* was a Species of Fennel or Dill, and so call it crooked Dill, or Fennel. This Root is very alexiterial, for which Reason it enters into the Composition of *Penic-Treacle*: It is likewise sudorifick and diuretick: The Dose of the Powder is a Dram. It is brought to us from the Mountains of *Auvergne*, *Burgundy*, the *Alps* and *Pyrenees*. Chuse such as is new, of a good Smell, and as little Worm-eaten and dusty as may be.

Meum Folii Anethi, or the *Fœniculum Lemery*. *lum Alpinum perenne capillaceo folio, odore medicato* of *M. Tournefort*, is a Plant which raises its Stalk a Foot high, hollow within, and full of Branches: The Leaves are like Fennel, but much less, more slash'd, and almost as fine as Hair: The Flowers grow in Bunches on the Tops of the Branches, like Dill; and when the Flowers are gone, a Swallow-tail'd furrow'd Seed succeeds. The Head of this Root is full of long Threads, like Eryngo. You ought to chuse the longest, roundest, well fed and entire, of a blackish Colour outwardly, and white within, the Smell aromatick, and the Taste sharp and a little bitter; it contains an exalted Oil, and a volatile or essential Salt.

[This is the Root of the *Meum vulgatum*, Park. 888. *Meum Folii Anethi*, C. B. Pin. 148. It grows in Meadows and Pastures, and flowers in June. It is esteem'd an Alexipharmick, and has a Place in some Compositions, but otherwise is little used. There is another Species of it call'd

Mutellina in the Shops, which is the *Meum Alpinum umbella purpurascens*, C. B. Pin. 148. It is suppos'd to have the same Virtues with the former, but is now never used.]

25. Of Tormentil and Bistort.

THE Tormentil used in Physick, which *C. Bauhinus* calls *Tormentum Pomet*. *tilla sylvestris*, *Wild Tormentil*, is a Plant, whereof the Root is lumpish, of an Inch thick, brown or reddish without, astringent and fibrous. The Leaves are like Cinquefoil, smooth, shining, six or seven at a Joint. The Stalks are low, short, branch'd, charg'd with several Flowers, of four yellow Leaves each; after which comes a Cluster of small Seeds.

The best *Tormentil Roots* come from grassy, wet Places about the *Alps* and *Pyrenees*. They use these in alexipharmick Compositions, as sudorifick. They are likewise used for the Bloody-Flux. Chuse the newest and best dry'd, from the hot Countries, which are better than what grow in our Gardens.

Bistort is a Plant that has a Root an Inch thick, crooked, and roll'd upon itself, with annular Foldings, brown without, and flesh-colour'd within, trimm'd with many hairy Fibres, and of an astringent Taste. The Leaves are like those of Wild Patience, of a lively green without, and a Sea-green on the Inside. This Plant is in Flower towards the End of *May*, adorn'd with several Leaves along the Stalk, smaller than those which rise first from the Root. The Leaves are of a Flesh Colour, crowded together in a Spike, but very short and very thick; after which comes a three-corner'd Seed. This Species is call'd by *C. Bauhinus*, *Bistorta major radice minus intorta*, the larger *Bistort* with the less winding or crooked Root.

Tormentil is a Plant of two Kinds: The first is call'd *Tormentilla*, by *Ray*; *Lemery*. *Tormentilla sylvestris*, by *Tournefort*; *Haptaphyllum*, by *Fuchsius*, by reason it bears seven Leaves on a Stalk, as the Cinquefoil does five. The Flowers are compos'd each of four yellow Leaves, in Form of a Rose, supported by a Cup cut and divided into eight Parts, four larger and four smaller placed interchangeably. The Root is knotty and unequal, and delights to grow in Woods and shady Places, or others well supply'd with Moisture.

The second Sort is call'd *Tormentilla Alpina major*, or *Tormentilla Alpina vulgaris major*, by *Tournefort*, the common larger *Alpine Tormentil*: This differs from the former, in that the Leaves are larger, and the Root thicker, more plump, redder,

10:46

of Roots.
Book 2^d.

Plate 19

24.



Spiancl.

25.



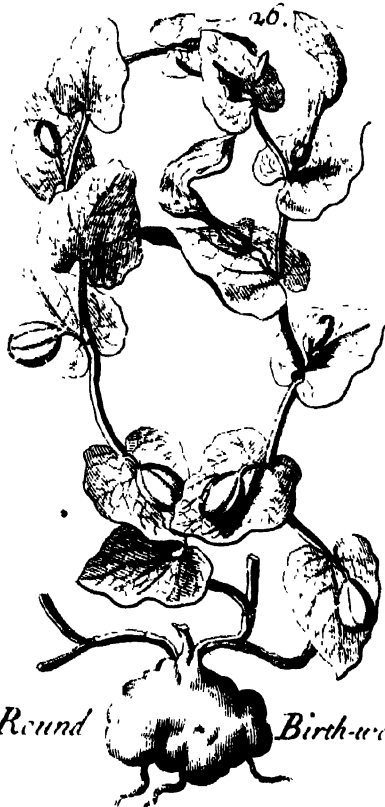
Fermentil.

25.



Rund

26.



Birth-wort.

Book 2
of Roots.

26



Small
Birth-wort.



Long
Birth-wort.

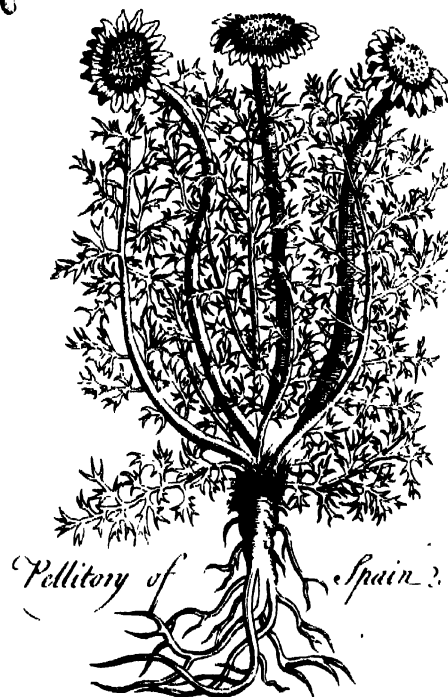


Clematis
Birth-wort.

27



True Pellitory
of Spain.



Pellitory of
Spain.

redder, and fuller of Virtue. We have this brought to us ready dry'd from the *Aps*, &c. The Way to chuse it, is to take the newest, best fed, about an Inch thick, clean, of one Piece, free from the Strings, well dry'd, of a brown Colour, raddish within, and of an astringent Taste. It is binding, vulnerary, proper to stop Loosenesses of the Belly, Hemorrhages, Vomiting, Whites or Reds in Women, and to resist Infection: It is mix'd with carduack and alexipharmick Medicines.

Bistort, as if you should say twice distorted, because the Root of this Plant is commonly turn'd and wound about itself: They give it the Name of *Bistort*, *Cohubrina*, *Serpentaria*, and *Dracunculus*, by reason that this Root is twisted like a Serpent: 'Tis also call'd *Britannica*, from growing so frequently in *England*. There grow, towards the Bottom of the Flower of some *Bistorts*, several Knots or Excrescencies, which some Authors have call'd *Fungi Bistorta*; but they are a Sort of little Roots, which produce each of them a Plant. It is cold, dry, astringent, and stops Fluxes of the Bowels, Vomiting, and Abortion, and dries up Catarrhs. It is given in Powder, Infusion, or Decoction in Wine and Water, and is good in a Gonorrhea, or Whites in Women.

[The *Tormentilla* is the Root of the *Tormentilla vulgaris*, Pak. 394. The *Tormentilla sylvestris*, C. B. Pin. 326. It is common in Woods, and flowers in June. 'Tis an Astringent and Alexipharmack; it is a good Addition to the White-Drink, which it changes to a fine red, and encreases very much its Virtue; it is also a good Ingredient in many other both officinal and extemporaneous Compositions.

The *Bistort* is the Root of the *Bistorta Radicinis intorta*, C. B. 192. *Bistorta major*, Ger. 322. It grows in many Places in *England*, in damp Meadows. It is a good Medicine in all Kinds of Fluxes and Hemorrhages, and is said also to be a good Alexipharmick.]

26. Of the *Aristolochias*, or Birthworts.

THERE are three Sorts of *Birthworts* generally sold, viz. the long, the round, and the small: There is a fourth Sort, which is the *Aristolochia clematidis*, or *Saracens Birthwort*; but as we make no Use of it, we shall not say much about it.

The round *Birthwort* is a tuberous, fleshy Root, of different Sizes, to two or three Inches Diameter. They are uneven and irregular, that is to say, commonly much larger at the Bottom than at the Top. This Root is of an intolerable

Bitterness, yellow within, brown without, but not disagreeable in Smell, and furnish'd with some slender Fibres: Several Stalks arise from the upper Part, which spring above a Foot high, beset alternately with almost round Leaves, sticking to and embracing the Stalk at the Bottom, cut into two Ears, or Swallow-tail'd: The Flowers grow at the setting on of the Leaves; they are yellow streak'd Pipes of an Inch and a half long, hollow and flat like an Ox's Tongue, of a very deep red, which almost comes up to a Soot-Colour; they are without Smell. The Seeds are black, very small and flat, almost triangular, and are enclosed in a small membranous Fruit, green in the Beginning, brown when ripe, and divided lengthways into six Cells.

The *Long Birthwort* is a Root like the *Horseradish*, but a great deal thicker and longer, fleshy, brittle, brown without, yellow within, very bitter, and something fibrous: The Stalks are longer than those of the round, bending to the Ground, beset interchangeably, with Leaves not altogether so round as the former, and which are supported by a small Stem. The Flowers are nearly like those of the round, but the Fruit is of the Figure of a small Pear, which likewise contains in its Cells very flat, black Seeds.

The Roots of the *Birthwort*, which *J. Bauhinus* call'd *Aristolochia Polyrhizos*; and *C. Bauhinus*, *Aristolochia Pifolochia dicta*, are the least of all. They are composed of an infinite Number of small yellow Fibres, sticking to the same Head, hairy, very bitter, and of a good strong Smell. The Stalks are weak, slender, bending to the Ground, interchangeably deck'd with very small Leaves, which are paler than those of the others, in Form of a Heart revers'd, and supported by very slender Stalks, bearing also Flowers like the round Kind, but much less, yellowish, mix'd with a sooty Colour. This is the *Birthwort* we sell for the small Sort.

The *Clematite*, or *Saracen Birthwort*, has fibrous Roots, very bitter, and of a Smell agreeable enough: The Stalks are two or three Feet high, strait, firm, and stronger than the former, furnish'd interchangeably with very large Leaves, of the Figure of a Heart, of a pale green Colour, hanging upon long Stalks. The Flowers stand at the joining on of the Leaves, after the same Manner as those of the other Kinds, but much less, and of a pale yellow. The Fruit, on the contrary, is larger, oval, and divided into six Cells, full of very fat Seed, which is triangular. *Paulinus* calls this Species *Aristolochia Clematidis dicta*.

All these Kinds grow in the Fields and Vineyards of *Provence* and *Languedoc*, except the

Small Birthwort, which loves the Woods, the Olive-yards, the dry and rocky Hills of the same Countries; it is also more aromatick and stronger. Messieurs *Rondelet* and *Charas*, with good Reason, prefer'd this *Birthwort* to the *Saracen* Kind, for *Venice-Treacle*. All the Sorts open Obstructions, and are purgative. They are used every Day with Success, in Decoctions, Injections, Lotions, deterfive and vulnerary Draughts, and the like.

The *Birthworts* ought to be chosen dry and well sed, especially the Round and the Long; heavy, yellow within, grey and smooth without; and the small one, which has little Use, except for the *Theriaca*, should be in fair Roots, something like those of Black Hellebore, well sed and new.

Aristolochia, or *Birthwort*, is a Plant, *Lemery*. of which there are four Sorts generally used in Physick: The first is call'd *Round Birthwort*, which is distinguish'd into two Sorts, one call'd *Aristolochia rotunda vera*, or *Aristolochia rotunda flore ex purpura nigro*, the *Birthwort* with the black purple Flower. It bears several Stalks, weak and pliant like the Vine Branch, about a Foot and a half high. The Root is tuberous, round, pretty thick, fleshy, fibrous, grey on the Outside, and yellow within, disagreeable to the Smell, and of a bitter Taste.

The second Kind of *Birthwort*, call'd round, is the *Aristolochia rotunda flore ex albo purpurascete*, the round *Birthwort* with the white purplish Flower. This differs from the other, in that the Stalks are more numerous, but shorter; and the Leaves much larger, oblong, and hanging upon longer Stalks; that the Flower is of a white Colour, inclining to purple, brown on the Inside; and that the Fruit is longer, more like a Pear; the Seed less, of a red Colour; and the Bark of the Root yellow. This Plant grows among the Corn in the Fields.

The next Sort of *Birthwort*, call'd Long, is of two Kinds; the first call'd *Aristolochia longa vera*, or *Aristolochia altera, radice pollicis crassitudine*, or the other Kind of *Birthwort*, with a Root the Bigness of one's Thumb. It bears several winding Stalks about a Foot and a half high, leaning to the Earth, carrying soft Leaves, less Swallow-tail'd than those of the round, terminating in a Point, and hanging upon their Stalks. The Flowers are like the Round; the Fruit in Form of a small Pear, producing a flat Seed: The Root is near a Foot long, sometimes the Thickness of a Man's Wrist, and sometimes an Inch. The Colour, Smell and Taste, like the others. This grows in the Fields among Corn, in the Hedges and Vineyards.

The second King of *Long Birthwort* is call'd *Aristolochia longa altera*, or *Hispanica*, the other *Long* or *Spanish Birthwort*. This differs from the former only in that the Flower is not so purplish within, and the Root is much shorter. This grows plentifully in *Spain*, in the Kingdom of *Valencia*, and other warm Places among the Vines. Both the Round and Long contain a great deal of essential Salt, Oil, and Phlegm. They all resist Pison, Pestilence, and the Gangrene. Both Root and Leaf are useful in external Remedies.

The third Sort, or Species of *Birthwort*, is call'd the *Saracen Birthwort*, or *Clematite*, of which there are two Kinds: First, the *Aristolochia Clematitis recta*: This bears straight, firm Stalks, of two Feet high, where there interchangeably hang, upon long Stalks or Tails, Leaves of the Figure of Ivy, but of a pale green: The Flowers grow in great Numbers upon the Necks of the Leaves, like the former Kinds, but less, and of a pale yellow Colour: The Fruit, on the other Hand, is larger, fill'd with black flat Seed: The Root is little, fibrous, winding on all Sides, grey, of an agreeable Smell enough, bitter in Taste, and pungent. This Plant grows in the Fields, Woods, Hedges, or Lanes, in the hot Countries.

The second Sort is call'd *Aristolochia Clematitis Serpens*, or *Altera Hispanica*: It bears a small Vine-like Stem, of three or four Feet high, hollow, winding, and clinging to other Shrubs, or neighbouring Plants, like the Hop or *Bindweed*: The Leaves are large, pointed, green, and united above, and purple and white underneath, join'd by long Stalks: The Flower and Fruit are like the *Clematite*; but the Flower is yellow, or of dark purple, lin'd within with a fine Wool. The Root is longish, and composed of many serpentine Fibres, of a pale Colour, acrid Taste, a little astringent, but not grateful. The whole Plant is sweet, and grows chiefly in *Spain*, in Bushes in the Olive-Grounds.

The fourth is call'd the *Small Birthwort*, of which there two Sorts; the first, *Aristolochia tenuis*, or *Aristolochia Polyrrhizos, sive Pistolochia Plinii*, it being the best to assist the Birth, or bring away the After-Birth, *Dioscorides* representing it to be the properest for that Purpose. This is the least of all the *Birthworts*: It produces several small Stalks, or Boughs, which spread themselves upon the Ground. The Leaves are form'd like the Ivy, but little and pale, fasten'd by slender Tails or Stalks. The Flowers are like those of the other Kinds, but a great deal smaller, sometimes black, sometimes of a yellowish green; the Fruit like a small Pear:

The

The Roots are very fine, stringy, join'd together by a little Head, in Shape of a Beard, or Head of Hair.

The second Sort of this is call'd *Aristolochia*, or *Pistolochia altera*: It bears Vine-like Stalks of a Foot in Height, that have corner'd, hollow, pliant Branches, lying on the Ground, of a dark green Colour: The Leaves like the other Sort, but sharper at the Ends, ty'd to long Stalks: The Flower and Fruit like the *Long Birthwort*; but the Flower is not of such a brownish red, and the Fruit much less: The Roots are fine, with slender Fibres, sweet smelling, like the former Species, and grow in the hot Countries. All the Kinds of *Birthwort* are detesive and vulnerary, good to provoke Urine and Sweat, to attenuate the gross Humours, and assist Perspiration.

[The *Round Birthwort* is the Root of the *Aristolochia rotunda flore ex purpura nigro*, C. B. Pin. 307. The *Long*, of the *Aristolochia longa vera*, C. B. Pin. 307. The *Small*, of the *Aristolochia Pistolochia dista*, C. B. Pin. 307. *Pistolochia vulgarior*, Park. 293. and the *Clematite*, or *Saracens*, of the *Aristolochia Clematidis recta*, C. B. Pin. 307. *Aristolochia Saracemica*, Ger. Em. 847. These are all kept in the Gardens of the Curious here. They are all possess'd of much the same Virtues; but the *Long* has them in the greatest Degree. It is esteem'd a Cleanser of the Womb, a Forwarder of the Menfes and of Delivery: It is also accounted an Alexipharmick, and has therefore a Place in the *Theriaca*. Externally used it is detergent and suppurative.]

27. Of Pellitory of Spain.

Pellitory of Spain is a Root of a moderate Length, the Thickness of a little Finger, greyish without, white within, furnish'd with some small Fibres, of an acrid burning Taste. It produces little green Leaves, and the Flowers of a Carnation Colour, like our Daïsies. Chuse such as is new, well fed, dry, difficult to break, and of a Taste and Colour as said before.

The *Pellitory* we have, is brought by *Marseilles* from *Tunis*, where it grows common: It is much in use for easing the Tooth-ach, being held in the Mouth; and is of several Uses in Physick. The Name of *Pyrethrum* is taken from its burning Quality; though some will have it come from *Pyrrhus*, King of *Epire*, who first discover'd its Use.

There is also another Sort of *Pellitory*, which the *French* call *Alexander's Foot*, and which is the tufted *Pellitory*: This is a little Root half a Foot

long, of a brownish grey without, and white within, something fibrous, at the Top of which grows a Sort of Tuft or Beard, like that of *Spignell*, of an acrid biting Taste, approaching to that of *Pellitory*, upon which Account it is call'd *Wild Pellitory*; and some use to sell it for true *Pellitory*, but it is easy to distinguish, this being smaller, longer, and carry'd about in Bundles. The Leaves of the Plant are very little, of a greenish yellow; and the Flowers, which grow in Umbells, are of a pale red. This is brought to us from *Holland*, and other Parts. Both this and the other ought to be chosen new, and in large Roots. They use this, as well as the other Kind, to make Vinegar in *France*; but this is of little Use in Physick.

Pyrethrum, in *English Pellitory*, or the Spitting Root, is brought dry'd to *Lemery*. us from foreign Countries; but we have two Sorts: The first, and the best, is in Pieces, about the Thickness of one's little Finger, round and wrinkled, of a greyish Colour without, and white within, deck'd with a few Fibres, of an acrid, burning Taste, and grows in the Kingdom of *Tunis*.

The Plant which bears this, is call'd *Pyrethrum Flore Bellidis*, the *Pellitory* with the Daisy Flower. Its Leaves are slash'd like those of the *Fennel*, but much less, and green, resembling those of the *Carrot*: They rise from small Stalks, which on their Tops support large radiant Flowers, of a Carnation Colour, like the Daisy: After them succeed small oblong Seeds.

The second Sort is a Root about half a Foot long, much slenderer than the former, of a brownish grey without, white within, furnish'd with Fibres. This Root has an acrid burning Taste, like the former, and is brought to us in Bundles from *Holland*. Some call it *Wild Pellitory*. The Plant which it bears is call'd *Pyrethrum Umbelliferum*, and by the *French*, *Alexander's Foot*. It grows a Foot high; the Leaves are small, cut fine as the other *Pellitory*, but of a yellowish green; the Flowers grow on the Tops, dispos'd in Clusters, of a pale red. Both the Sorts of *Pellitory* contain a great deal of acrid Salt and Oil, but the first is more powerful than the second. There is also a *Pseudo-pyrethrum*, which is call'd *Ptarmica*, or *Sneeze-wort*, which grows in Meadows, or untill'd Grounds. The Roots are chiefly kept in the Shops; being hot and dry, it is inciding, attenuating, and violently sudorifick; used chiefly against viscous Flegm in the Lungs, which it expels by Spitting and Urine: It is good against most Diseases of the Brain and Nerves; expels Wind, and prevails against Apoplexies, Lethargies, Vertigo's, Palsies, benumb'd Members,

Chelicks : It stimulates the Fibres, and is said to cure **Quartan Agues**. A Gargle of it cures the **Thrush**, and cold **Rheum** in the **Teeth**, or **Gums**.

The **5th Pyrethrum** mention'd here, is the Root of the **Pyrethrum Fere Bellidis**, C. B. Pin. 148. **Pyrethrum Carymiferum Flore Bellidis**, H. Ox. 3. 32. and the other of the **Pyrethrum Umbelliferum**, C. B. Pin. 148. **Pyrethrum Umbelliferum Matthioli**, J. B. 3. 20. It is a Dispute among Botanical Writers, which of these is the true **Pyrethrum**. **Di scorides's** Description agrees no way with the umbelliferous Kind, that many therefore think to be the true; and those who are of Opinion that the Daisy-flower'd one, is the true, reconcile it to **Di scorides's** Description by the Alteration of a Word in the **Greek**, where they say, has been an Error of the Press, and that the Word **Πυρεθρον** is the true Reading, instead of **Πυρεθρον**. Their Virtues are much alike, but the last is the stronger.

28. Of White and Red Behen, or Ben.

Pomet. **THE White Ben** is a Root like the **Pellitory**, grey without, and something white within; the Taste almost insipid, but being held long in the Mouth, it leaves a Bitterness disagreeable enough. This Root is brought to us from the same Places that the **Red Ben** is, and the Leaves are much the same, except that this has, at the Bottom of each Leaf, four small ones of the same Form and Colour, that grow opposite to each other; in the Middle of which rises a high Stalk, adorn'd with some few Leaves, and a Budding of Scales, which, when blown, produces a little yellow Flower. Chuse your Root plump, not rotten, or easy to break, but the freshest you can possibly get. It is appropriated to the same Intentions with the **Red Ben**.

The **Red Ben** is a Root, brought to us cut in Pieces like **Jalap**, from **Mount Libanus**, and other Places of Syria, which, in the Ground, is of the Shape of a **Wild Pistach**, deck'd with Fibres, of a brown Colour outwardly, and red within, from whence arise several long Leaves, like those of the **Almond**, or **Walnut**, for which Reason some think it to be a Species of that Plant; from the Bottom of which grow Stalks adorn'd with two Flowers, which are rang'd two and two together, of the Shape of **Jamaica-Pepper**. Chuse such as is of a high Colour, astringent, aromatick, and firm as it can be. It is not much used in Medicine, and those who should use it, generally substitute the Root of **Angelica**,

Zedoary, **Borrage**, or **Buglos**, in its Place. It is reckon'd cordial, and a Resister of Poison.

[There has been much Dispute about what were the **Behen Album** and **Rubrum** of the Antients: The **Album** has been by some judg'd to be the **Lycbium Asquefotia**, quæ **Behen Album vulgo**, C. B. Pin. 208. by others the **Serratula affinis Capitula squamifera luteo ut et flore**, C. B. Pin. 235. and by others, the **Jacca orientalis parvula**, **Carambini facie flore luteo magna**, Tourn. Cor. 32. The second of these is the Plant describ'd by **Pomet**, but the last in all Probability is the true **Behen Album** of the **Arabians**. The **Behen Rubrum** is in all Appearance the Root of a Species of the **Linnum**, and the Root of the common **Limonium** is generally order'd in its Place; neither of them, however, are now much used in Medicine.]

29. Of Alkanet.

ALKANET is a Root of a moderate Size and Length of a deep **Pomet**. red Colour on the Outside, and white within, which produces green rough Leaves, like the **Buglos**. For which Reason some call it **Wild Buglos**. In the Middle of which arises a straight Stalk, adorn'd with little Leaves and Flowers, in Form of a Star, of a faint pale Blue. Chuse your **Alkanet** new, pliant, but yet of a deep red without, white within, with little blue Heads, and which, being rubb'd a little, wet or dry, upon the Nails, or on the Hand, makes a beautiful Vermillion.

As the Colour of the said Root lies in the Superficies, those who use it for colouring of their Wax, Ointments or Oils, prefer the Small to the Gross, and if it is clean, it produces a very fine red. The **Alkanet** grows in **Provence**, from whence it is brought to us by the **Way of Antilles**, and **Nîmes in Languedoc**. This Root is very useful in Physick, as well as for the Purposes aforesaid. It is astringent and deterfive, stays Loosenesses, and is used for cleansing and drying old Ulcers.

There is another **Alkanet** of the **Levant**, or **Constantinople**, which is a Root of a surrizing Nature, as well from its Size and Thickness, as it grows sometimes larger than the Arms, or its Figure, for it looks to be nothing but a Mass of large long Leaves, twisted like a Root of **Tobacco**, and of a great Variety of Colours, the first being an obscure Red, which is succeeded by a very fine Violet Colour; at the Top of which is a Kind of Mouldiness, which is white and blueish, and, as it were, its Flower. In the Middle of the said Root is found a Heart, which is a little Bark, thin and long, like **Cinnamon**,

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of Roots.

28.



Red Behn.



White Behn.

29.



Orchanette of y' Levant.



Common Orchanette.

of a very fine red without, and white within. This *Alkanet* is very little in Use, but yet gives a better Colour than the common.

Anchusa puniceis floribus, or *Bugloss-Lemery*. *sum radice rubra, five Anchusa vulgaris*, by *Tournefort*; in *French*, *Orcanette*, is a Species of *Buglos*, a Plant which bears several Stalks above a Foot high, bending to the Ground. The Leaves are like those of the *Wild Buglos*. The Flowers grow on the Top of the Branches; and, when they fall, are succeeded by Cups, which contain Seeds shaped like a Viper's Head, of an Ash-Colour: The Root is an Inch thick; the Bark red, and whitish towards the Heart. This Plant grows in sandy Places in *Languedoc* and *Provence*. The Root is dried in the Sun, to be fit for the Druggist's Use. It makes a good Dye for Pomatums, and the like; and yields a great deal of Oil, with a little Salt: It is astringent, stops Fluxes of the Belly, being made into a Decoction. They use it outwardly for detarging, and drying up of old Ulcers.

We have brought to us oftentimes from the *Levant*, a Kind of *Orcanette*, call'd *Orcanette of Constantinople*: This is a Sort of Root as thick and large as a Man's Arm, but of a particular Shape; for it produces a Mass of large Leaves twisted like a Tobacco-Roll: In Appearance the whole looks as if it was artificial.

[The *Alkanet* of the Shops is the Root of the *Anchusa puniceis floribus*. C. B. Pin. 255. *Anchusa minor purpurea*. Park. 517. It is not much used in Medicine. Some to prevent the Loading the *Lucatellus's* Balsam with the Powder of *Sanders wood*, give it its red Colour by first boiling this Root in the Oil, as others do, according to the *Edinburgh Dispensatory*, with the *Sanguis Draconis*.

There is also another Species of *Alkanet*, the *Anchusa lutea* of the Shops, which is the Root of the *Sympligium Echii folio ampliori flore luteo*. Tourn. Inst. 138. But it is less used than the other. The *Levant Alkanet* is artificial.]

30. Of Madder.

Tinct. THE Madder, which is call'd *Rubia tinctorum*, is the Root of a Plant well known. 'Tis of this Root the Dutch make such great Advantages, by the Quantity of it they sell in different Countries, and particularly in *France*.

The Madder comes to us in three sorts. The first Sort is brought in the Root just as it comes out of the Ground, without any other Preparation than that of being dry'd. The second Sort is the Root Madder, freed from the Bark and the

Heart, and ground by a Mill into a gross Powder, as we buy it. The third Sort is the Root Madder in the gross, ground to Powder. But the second Kind is the best; which to have all its Perfection ought to be, when new taken out of the Earth, of a pale red, and to grow to a very fine red in keeping. That of *Zealand* is esteem'd the best. It is used by the Dyers, and in Physick. It is hot, deficative and vulnerary, good in Obstructions of the Liver and Spleen, in the jaundice, and Suppressions of Urine.

Madder is a Plant whereof there are two Sorts; one call'd *Rubia tinctorum Lemery. sativa*, according to *Tournefort*; *five hortensis*, according to *Parkinson*, that is, the Garden or cultivated Madder. The other is *Rubia sylvestris* or *Erratica*. The first Kind bears long four-squar'd Stalks, knotty and rough, from whence shoot out at every Joint five or six oblong narrow Leaves, which surround the Stalk in the Shape of a Star or Wheel. The Flowers grow on the Tops of the Branches, fasten'd by little Stems: They are in small Cups cut into five or six Parts, disposed like a Star, of a yellow greenish Colour; and when the Flower is gone, the Cup brings forth a Fruit of two black Fruits, ty'd together full of Juice; each of which contains a Seed almost round, enclosed in a Membrane or Pellicle. The Roots are numerous, long, and divided into several Branches; about the Thickness of a Goose-Quill, red throughout, woody, and of an astringent Taste. They cultivate this Plant in rich Ground, in many Parts of *Europe*, and gather the Root in *May* and *June*, to dry it for keeping and Transportation.

The second Sort, call'd *Rubia Erratica*, or *Wild Madder*, is much less, and rougher than the former: The Flowers are small and yellow: It bears the Fruit in Summer and Autumn, which lasts the same in Winter. It grows in the Hedges about *Montpellier*; the Root is only used in Physick, especially that of the Garden Kind: It contains a good deal of essential Salt and Oil. Both the Sorts are aperitive by Urine, and a little astringent for the Belly: They provoke the Terms, open Obstructions, and are used successfully in the *Jaundice*, and may be given in Powder, Tincture, or Decoction, to the Purposes aforesaid.

[This is the Root of the *Rubia Tinctorum sativa*. C. B. Pin. 333. *Rubia major sativa five hortensis* 274. It is cultivated in Gardens and Fields, and flowers in *June*. The Root is of a sweetish Taste, mix'd with some Bitterness. It is commonly used in Decoctions, Diet Drinks, and medicated Ales for Obstructions of the *Viscera*.]

31. Of Salsaparilla

Root. *Salsaparilla* is the long Filaments, or *Spanish Pars* of a Root, the Plant whereof runs upon Hills, Hedges, Trees, &c. with long, whitt, pointed Leaves, of a dark green Colour, and with Fibres: At the Bottom of the Leaves grow little Filaments, which make sort of Trees, as the Vine does: On the Top of the Branches arise little white Flowers; from a small Root comes a small red Fruit, as the *Spanish Pars*. This Plant grows plentifully in the *West-Indies*, and in *Peru*, and in the *Indies* as well as the *West-Indies*, and delights in wet and marshy Grounds.

Some will needs have it that this *Salsaparilla*, is a Plant which is very common in *France*, and call'd *Smilax aspera major*, the large prickly Bindweed, or *Smilax*. There are two Sorts of *Salsaparilla* sold, viz. the *Indian Salsaparilla* of *Spain*, and the bigger *Salsaparilla* of *Marignan*, or *Maraban*. The finest and best of the two, is that of *Spain*, which to be in its Perfection ought to be a long stringy Root, the Thickness of a Goose-Quill, greyish without, and white with two reddish streaks within, easy to split in two, and when it is split free from Dust or Wormholes, and such as being boil'd, tinges the Water of a reddish Colour. Reject such as is moist, extremely small, full of Fibres; and likewise a Sort of *Salsaparilla*, from *Holland*, in little Bunches, cut at both Ends. Some will have it that the *Salsaparilla*, reddish on the Outside, and ty'd up in long Bunches, which comes by the Way of *Marseilles*, is not so good as the other; but, for my Part, I can assure, I never could find any Difference between that and the true *Spanish Salsaparilla*: The large *Eastard Salsaparilla*, or that of *Marignan*, ought absolutely to be rejected; this is call'd falsely *Muscovy Salsaparilla*, but it is fitter for lighting of Fires than to be used in Physick. The Use of this Root is for *Pisians*, or Diet-drinks, for curing the *Veneral Disease*, and making such lean as are too fat. The Dose in Decoction is from half an Ounce to an Ounce.

Sarsaparilla, or *Salsaparilla*, is a *Lemery*. very long Root, like a small Cord, which is brought from *New Spain* in Collars, or long Bundles of stony Branches, the Thickness of a writing Quill. This is the *Smilax*, or *Bindweed*, call'd *Smilax Aspera Peruana*, *frus Salsaparilla*. The Stalk is long, serpentine, woody, prickly, yielding, and climbing like the Vine upon every Shrub or Tree. The Flowers, which are of a white Colour, at last produce

Berries, which are round and fleshy like small Cherries, green at first, a little reddish afterwards, and at last black, which contain in them one or two stony Nuts, of a whitish yellow, in which is a Seed, or white hard Kernel. The best *Salsaparilla*, is that which is round, full, apt to break when beat together, mealy, and white within; that which is thread'd, lean, tough, and not mealy, being nothing near so good. There is some which comes from *Jamaica*, but that is tough, not mealy, and of no great Value with the *Spanish*. Our Merchants bring another Sort, which they call *Marignan Salsaparilla*, which is larger and groffer than that of *Peru*, and nothing nigh so good. It is call'd *Salsaparilla*, which is as much as to say, in the *Indian Tongue*, a Plant made up of the Vine and Bramble. The Root is sudorifick, alexipharetk, and a great Alkali. Its chief Use is against the *French Pox* and its Symptoms, the King's-Eye, Rheumatisms, Catarrhs, Gouts, and all Diseases proceeding from them, taken in a Powder, from a Dram to two Drams.

[It is the Root of the *Smilax aspera Peruviana frus Sarsaparilla*. C. B. Pin. 296. *Smilax Peruviana Salsaparilla*. Ger. 709. It was formerly used in *America* for Venereal Diseases, and from thence grew in Use here in the same Intentions, tho' its Virtues are at present very much suspected; it is but in a few of the Official Compositions, but pretty much in extemporaneous Prescription, and constantly taken by many People as a Kind of Tea.]

32. Of China Root.

THE *China* is a knotty crumpled Root, red lish without and within; *Pomct.* which, from the Ground, sends forth Stalks that climb upon other Plants, from whence grow large green Leaves, in the Shape of a Heart; the Stalk is furnish'd all along with little Prickles like Thorns.

The *China* which we sell, is brought to us from several Parts of the *East-Indies* as *China*, both by the Way of *Holland*, *England*, and *Marseilles*, sometimes just as it is taken out of the Ground, but oftener cleansed in Part from its outer Skin, and with its Ends cut off, to make it sell the better.

Chuse such as is heavy, resinous, difficult to cut, cleansed of its outer Skin, of a reddish Colour, and take Care that it has not been Worm-eaten, and the Holes stop'd with Bole, or such other Matter, as is very frequently the Case. The *China* is much in Use to make sudorifick *Pisians*, and

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Spanish Salsaparilla.



Madler



China Root

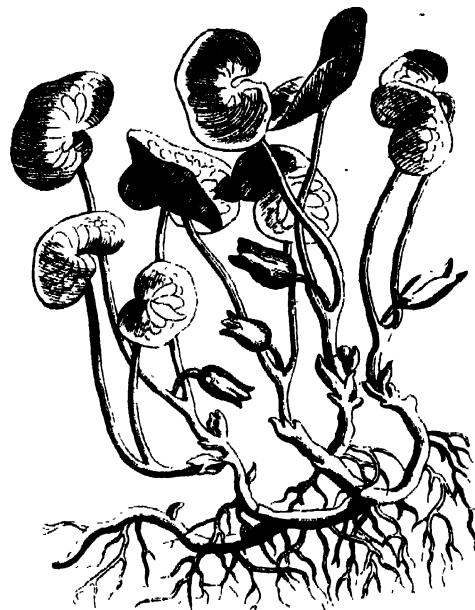


Bastard Salsaparilla

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of Roots.
33.



Asarabacca



Asarabacca

35.



true *Ascorus*

34.



Liquorice

and is employ'd to that Purpose with *Salsaparilla*, one being seldom used without the other.

There grows in the Islands of the *Antilles*, a large Root, which some affirm to be the true *China*; but as that is not yet confirm'd, I shall refer the Reader to a Book of the Reverend Father *du Tertre*, who has made a large and large Description thereof; but as that Account has no Relation to our Business, I do not think it proper to say more of it.

[These are two kinds of *China Root* sold in the Shops; the true Kind is the Root of the *China Orientalis seu Smilax, species Chinesica Lampatan dista* in MSS. Herbar. *Saukura Smilax minus Spinosa fructu rubicunda, radice Virtus China Dist. Kœmp. Amoen Exot. 781.* This is brought to us from *China*. The other is the *China Spuria Nodosa. C. B. Pin. 297.* The *Pseudo China Park. 1579.* It is the Root of the *Kaboloſſa Rihumawel Smilax Indica Spinosa folio Cinnamomi, Pseudo China Gleditsiam. Mus. Zeyl. 22.* This is brought to us from the *West-Indies*. It differs but little from the other, and in all Probability is the Root of the same Plant brought into a different Climate. It was once in great Esteem in the Venereal Disease, but has now lost much of its Credit.]

33. Of *Afarum*, or *Affarabacca*.

THIS Root commonly call'd *Affarabacca Cabaret*, or *Wild Spiknard*, grows very frequently in most Parts of the *Levant*, in *Canada*, and likewise in *France* all about *Lyons*. This Root, when in the Earth, sends forth Stalks, on the Tops of which grow green thick Leaves, like a Heart, the Flower is rose fashion'd, and of a reddish Colour.

Choose the true *Afarum* from the *Levant*, if you can possibly get it, and such Roots as are the most beautiful, not fibrous or broken, but of a grey Colour on the Outside and Within, of a penetrating quick Smell, and of an acrid Taste, attended with a little Bitterness. Take care that you do not take the *Astrina*, or small *Spiknard* for it, which is brought to us from *Burgundy*, and may be easily distinguish'd, in that the *Afarum* has grey Roots of the Thickness of a writing-Pen, and the *Astrina* is in little blackish Roots, dry and full of Filaments.

It is observable that this Plant has its Root lying upon, and hardly at all entering into the Earth, but at a Foot Depth under some of the Roots there are knobby Substances, like Truffles in Shape, yellowish without, and white within, which when squeez'd emit a milky Juice, which

is caustick like Fire. This I mention here, not knowing that any other Person has observ'd, or written about it.

The *Afarum* is but little used in Medicine. It is an Emetick infused in the Quantity of two Drams, or something more, in half a Pint of White Wine, or given in Powder. It is a Diuretick also, boil'd in Water, and has a Place in some Galenical Compositions.

Azarum, or *Afarum*, wild *Spiknard*, is a small Plant which bears its Leaves *Lemny*, like those of the *Ground-Ivy*, but smaller, rounder, tenderer, smoother, and of a shining green, fasten'd upon long Stalks. The Flowers grow near the Root, supported upon short Stems, which arise at the bottom of the Stalks of the Leaves: Each of the Flowers has five or six purple Supporters, which rise up the Hollow of the Cup, that is divided commonly into three Parts. When the Flower is gone, a Fruit follows in the Cup, which is cut into six Parts, and divided each lengthway into six Lodgings, which contain in them little, longish brown Seeds, full of a white Substance, whose Taste is something acrid. The Roots are close by the Ground, small corner'd, creeping, knotty, crooked, and stringy. This Plant grows upon the Mountains, and in the Gardens or shady Places, and the Leaves continue green all the Year. It purges upwards and downwards; is aperitive, and opens Obstructions. The Dose is from half a Dram to two in Infusion, and from half a Scruple to a Dram in Powder. It is likewise used in several Compositions, where it does not vomit at all, because it is mix'd but in small Quantities, with abundance of other Ingredients.

It is the Root of the *Afarum Vulgare. Park. 266. Afarum vulgare Rotundifolium. Hist. Ox. 3. 511.* It is kept in Gardens and Flowers early in the Spring. Much has been said in its Praise in many Intentions, but it is now seldom given inwardly; its principal Use is in a sort of Snuff made of the dry'd Leaves reduced to Powder, which powerfully drains mucous Humours from the Head.

The other Species is the *Afarum Virginianum seu Serpentina nigra*, the *Afarum Virginianum folio cordato Cyclaminis more Maculato. H. Ox. 3. 511.* The Roots of this are sometimes offer'd to Sale for the true *Snake Root*.]

34. Of *Liquorice*.

Liquorice, which the *Latins* have call'd *Glycyrriza*, *Liquiritia*, *Radix dulcis*, is a Plant which has clammy Leaves, green, shining, and roundish; the flowers are of a pur-

a purple Colour, from whence come the Husks, wherein the Seed is contain'd.

The *Liquorice* sold at *Paris*, is brought thither by Bales, from several Parts of *Spain*, but chiefly from *Bayonne* and *Saragossa* Side of the Country, where that Plant grows in abundance. Chuse your *Liquorice* fresh, smooth, of about two Fingers thick, reddish without, of a Gold-Colour within, easy to cut, and of a sweet agreeable Taste. That of *Saragossa* is the best, and is to be preferr'd to that of *Bayonne*, which is greyish without, less, earthy, and of little Esteem. It must be carefully preserv'd lest it spoil, for when one Piece of it begins to taint, the whole Parcel is in Danger. As to dry *Liquorice*, chuse such as is yellow and dry, and take Care that it is not the Refuse of the Bales, which is commonly black, spoil'd, and of no Value. The Use of *Liquorice* is too well known for me to need to describe it. I shall however observe that *Liquorice Powder* taken with an equal Quantity of Flower of Brimstone, from two Ounces to four, according to the Size of the Horse, twice a Day for eight Days, is a good Remedy to prevent broken Windedness when it is first perceived, and will prevent the Malady from appearing for some Days, which those who buy Horses ought to be upon their Guard about.

During the Use of this Remedy, the Horse must be kept at Rest, and have as little Hay as possible.

Of Black Liquorice Juice.

They make of *Liquorice* and warm Water, a strong yellow Tincture, which afterwards is evaporated over the Fire, to a solid Consistence, till it becomes black, and is what we call black *Liquorish* Juice, which comes to us ready made from *Holland*, *Spain*, and *Marseilles*, in Cakes of different Sizes, which sometimes weigh four Ounces, or half a Pound. The *Liquorish* Juice which has the most Virtue, is black without, and of a shining Blackness within, easy to break, and of a grateful Taste enough; reject such as is soft, reddish, and, when broke, is dirty or gravelly, and has a burnt Taste. The Juice is very useful to cure those who are afflicted with Fluxes of Rheum, Coughs, Asthma's, &c. chewing it in the Mouth like Tobacco, or dissolving it in any convenient Liquor. We sell besides, other Kinds of *Liquorish* Juices, as those of *Blois*, both white and yellow, and those of *Rheims* or of *Paris*, which are cut into flat Pastilles, or made round like a small Wax-Candle. The white Juice of *Liquorish*, as 'tis call'd, made at *Paris*, is a Composition of *Liquorish* Powder, Sugar, Al-

monds, and *Orrice* Powder; but as there are various Methods of making up these Kinds of Lozenges, either with Gums, Sugars, or Variety of Drugs, I shall pass them by, and only say, that I think the black Juice, singly, to have more Virtue than any of the Compositions.

There are several other Roots sold in the Shops, besides what I have mention'd, which grow in the Gardens, and other Places about *Paris*, as the *Enula Campana*; the *Paeony*, male and female; the greater and lesser *Arum*, or *White Robin*; the *Dog-grass*, or *Quick-grass*; and several others, which the Herb-sellers furnish us with, as we have Occasion.

Glycyrrhiza vulgaris, or, according to *Tournefort*, the *Glycyrrhiza filiquosa*, *Lenery. vel Germanica*, is a Plant which bears several Stalks three or four Foot high: The Leaves are longish, viscous, green, shining, disposed into Wings like the *Acacia*, ranged in Pairs along the Side, terminating in a single Leaf, of a smart Taste, tending to an acid. The Flowers are of the leguminous Kind, and purple-colour'd, succeeded by short Husks, which enclose Seeds that are ordinarily of the Shape of a little Kidney. The Roots are large and long, dividing themselves into several Branches, some as thick as one's Thumb, and others as the Finger.

There is another Sort of *Liquorish* which is call'd, *Glycyrrhiza Echinata*, or *Glycyrrhiza capite Echinato*, the prickly *Liquorish*, or that with the *Chestnut Head*: It bears its Branches a Man's Height, carrying long Leaves, sharp at the Ends, and made like the *Mastick Tree*, green, a little glutinous, and disposed as the former Species. The Flowers are small, bluish; after which grows Fruit composed of several Husks, which are longish and bristled at the Points, standing one against another, and join'd together almost at the Bottom. The Roots are long, and as thick as an Arm, growing straight in the Ground, without any Division, at all. This grows chiefly in *Italy*, and is of no Kind of Use, because the other Sort is so much the better both in Taste and Virtue.

Liquorish is brought to us out of *Spain*, and many other Countries of *Europe*, but the best is that which grows in *England*. The best is large, thick, substantial, and of a good Length, being of a brightish yellow within. The *Spanish* is much like the *English*, save that it dries faster, and is more wrinkled in its Bark. That which comes from *Brandenburgh* is a good Kind, and being dried will keep good two Years. It is one of the best Pectorals in the World, opens Obstructions of the Breast and Lungs; easeth griping of the Bowels and Cholick, and is good to mix with

Catharticks. It cures Ulcers of Kidneys and Bladder, allays Sharpness of Urine, and pissing of Blood; is singularly useful against Coughs, Colds, Asthma's, Wheezing, Difficulty of Breathing, and other Diseases of these Parts.

[This is the Root of the *Glycyrrhiza filiquosa* vel *Germanica*. C. B. Pin. 352. *Glycyrrhiza vulgaris*. Ger. Em. 1302. It is cultivated in Fields and Gardens, and flowers in June; its chief Place of Growth with us is about *Pontefract* in *Yorkshire*; tho' of late there is a great deal cultivated near *London*. We have two Sorts of the Liquorice Juice in the Shops, the one call'd *Spanish*, which is made near *Tortosa* in *Catalonia*; the other is made here of the stringy Parts of the Root, and mix'd with the Pulp of Prunes; but they are easily distinguish'd, as that from abroad is of a much finer Colour and Consistence, and harder and more brittle.]

35. Of Hermodactyls.

Pomet. **T**HE *Hermodactyls* are small bulbous Roots, of the Shape of a Heart, generally of the Bigness of a middling Nut, but flat; of a reddish Grey without, and White within; heavy and compact, and almost of an insipid Taste, while they are fresh; but light, and subject to be worm-eaten when old: They are brought dry'd from *Egypt* and *Syria*.

The Plant has Leaves like the Leek, of a fine Green; among which rises a Stalk, which carries on its Top a small pear-fashion'd Fruit. Chuse such as are fresh, large, well-fed, reddish without, and white within, the driest and least full of Dust that can be got. It is a Commodity of which it is best to lay in no great Store, it being so ready to decay, or worm-eat, as I mention'd before. They are much us'd in Physick, in several *Gallic* Compositions.

The *Hermodactyl* is a tuberous or **Lemery.** bulbous Root, as thick as a little Walnut, being of the Shape of a Heart, red without, and white with'n, of a spongy light Substance, without Fibres, easy to break, and crumble into Powder like Meal, of a sweetish Taste, a little glutinous. It is brought dry from *Egypt* and *Syria*. The common Opinion is, that it is a sort of *Colchicum*, call'd by *Casp. Bauhinus*, *Colchicum radice siccata alba*; and by *Lobel*, the *Hermodactyl* of the Shops that is not poisonous,

There are others that believe it is a kind of tuberous Orrice, called by *Casp. Bauhinus*, *Iris tuberosa folio anguloso*, the tuberous Orrice with the corner'd Leaf, and by *Manthius*, *Hermodactylus verus*: So that we ought to suspend our Judgment

on this Affair, and wait 'till it is decided by more Travellers that can give a better Light into this Business, and sufficiently clear up our Doubts. It is a singular Purge, expelling tough Flegm, and clammy Humours, from the Joints and extreme Parts of the Body; and is accounted a Specifick against the Gout in the Hands and Feet, given in Powder, from half a Dram to a Dram; and in Infusion, from two Drams to half an Ounce. The *Hermodactyl* Pills are good against Palsies, Tremblings, Convulsions, Colicks, Gouts, &c. being given from two Scruples to four.

[It is very much disputed yet, among the best Authors, what the *Hermodactyls* are the Root of; the most probable Conjecture is, that the Plant which produces them, is the *Colchicum Chionense floribus Fritillariae instar tessellatis foliis undulatis*. Hist. Ox. 341. *Colchicum variegatum Meliagridis Facie*. Cornut.

They were commonly us'd as a Purge among the Antients; but their Action is very slow, tedious, and fatiguing; they are best corrected with Aromaticks, and are now sometimes mix'd with Jalap, and given in Rheumatisms, and are an Ingredient in the *Electuarium Caryocostinum* of the Shops.

The Women of *Egypt* eat them roasted to make them fat.]

36. Of the true Acorus.

THE true *Acorus*, which is improperly call'd *Calamus Aromaticus*, is **Pomet.** a knotty Root, reddish without, and white within, adorn'd with long Filaments, or fibrous Strings, of a light Substance, and easily subject to be worm-eaten. There arise from the said Root green Leaves, long and narrow; the Fruit is about three Inches long, of the Size and Shape of long Pepper.

Chuse your *Acorus* new, well-fed, clean'd from the Fibres, hard to break, of an acrid Taste, accompanied with an agreeable Bitterness, of a sweet Smell, and very Aromatick; 'tis for this Reason it is more known by the Name of *Calamus Aromaticus*, though altogether improper, than that of the *Acorus*. This Root, which is commonly of the Thickness of a little Finger, and about half a Foot long; is brought to us from several Parts of *Poland*, and of *Tartary*, and likewise from the Isle of *Java*, where it is call'd *Diringo*. The *Acorus* is of Use in Physick; it is warm, diuretick, stomachick, cordial, and a Resister of Poison, and is one of the Ingredients of the Treacle, without any other Preparation but being well pick'd and clean'd, and freed from Dirt, or any thing else that may stick to the Root;

Root; but its principal Use is for the Perfumers. There is another Sort of *Acorus*, call'd the false *Acorus*, and in Latin, *Acorus adulterinus*, which is a Species of Flag-flower, with yellow Flowers, growing in watry Places: It is attendant, resolutive, strengthening, and proper to stay Fluxes of the Blood, and Hemorrhages, but is little us'd.

The true *Acorus*, or *Calamus Aromaticus*, now of the Shops, is a Root the Length of one's Hand, a Finger's Thickness, and of little Knots and Stringes, of a fine light Green, reddish without, and white within, sweet, acid, and commonly us'd, but falsely, *Calamus aromaticus*. It is brought from Lithuania, Tartary, &c. The Leaves of the Root are long, almost like the *Orrice*. There is false *Acorus*, which is call'd, in Latin, *Acorus adulterinus*, *flagellatus latius*; which is a Species of the Flag-flower; These grow in marshy and other watry Places. Sometimes this Root is us'd in Physick, but rarely. Both Sorts contain in them a good deal of essential Oil, mix'd with volatile Salt. The true Root is bitter, and of a sharp Taste, stomachick, heating and drying, of thin and subtil Parts, attenuating, inciding, and aperitive; it opens Obstructions of the Liver, Spleen, and Womb, relieves in the Cholick, and provokes the Terms. It may be given in Powder, the candied Root, Oil or Extract, from a Scruple to half a Dram; or in the *Electuary Diacorum*, which you may see in the *London Dispensatory*.

[This is the Root of the *Acorus verus seu Calamus aromaticus Officinarius*, C. B. Pin. 34. *Acorus verus Officinarum falso Calamus*, Ger. Emac. 62. It grows in wet Places, and produces its Spike in June.]

The best Judges in Botany are agreed, that this is not the true *Calamus aromaticus* of the Antients, but the *Acorus verus* of *Dioscorides*.]

37. Of the true aromattick Reed, or Calamus Aromaticus.

THE true *Calamus*, or rather the bitter *Calamus*, is a Reed the Thickness of a Quill, of two or three Foot high, compos'd of Joints, from whence grow green Leaves, and little Clusters of yellow Flowers. This little Reed grows in several Parts of the *Levant*, from whence it is convey'd to *Marseilles*, sometimes whole, but generally in small Bundles of about half a Foot long. Chuse the largest which is fresh, cleans'd from the small Roots and the Bark, and made up in Bundles; it ought to be of a brownish Red without, and whitish within, furnish'd with a white Pith; for

when it is stale the said Pith will turn yellow, and fall into a Dust, as if Worms had eaten it: It ought also to break into Splinters, and, when you put it into your Mouth, to have an intolerable Bitterness. It is chiefly us'd for *Venereal Treacle*.

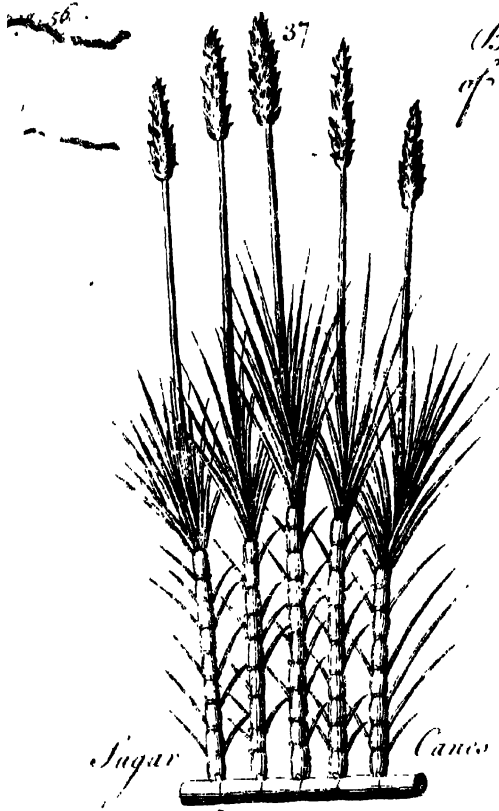
Calamus verus, seu amarus; the true or bitter *Calamus*, is a kind of Reed *Lemery*, which we bring dry from the *East-Indies* in little Bales. It grows about three Foot high; the Stalk is reddish without, and full of a white Pith within; it is divided by Joints, on each of which grow two long green Leaves, sharp at the Ends; the Flowers rise on the Tops, dispos'd in Clusters or yellow Plumets. It is sweet scented and fragrant, but somewhat bitterish in Taste, breaks white, and is a little knotty. This is us'd against Diseases of the Head, Brain, Nerves, Womb, and Joints. There is prepar'd from it, as from the *Acorus*, the Confect, the Spirit, the Oil, the Extract, and the *Electuary Diacorum*.

[This is the true *Calamus Aromaticus* of the Antients; it is the Stalk of the *Cassabel Darinra*, Alp. Exol. It grows in *Egypt*, and has four leav'd Flowers, succeeded by long pointed Seed-Vessels, full of very small black Seed; but its Virtues are unknown among us at present.]

38. Of the Sugar-Cane.

SUGAR-CANES are Reeds which grow plentifully in several Parts of the *Pomet*. *West-Indies*, in *Brasil*, and the *Antilles* Isles. These Canes, or Reeds, being in the Ground, shoot out from every Joint, another Cane, of five or six Foot high, which is furnish'd with long, green, narrow, sharp Leaves. In the Midway of the Height of every Cane, there grows a Stalk, terminated in a Point, at the Top of which stands a kind of Flower, of a Silver Colour, and in the Shape of a Plumet.

The *Indians* prepare the Ground, digging about half a Foot deep, with their Spades, in Furrows, in each of which they place a Cane of about three Foot long, and lay two other Canes, one at each End, for a Foot Length under it; and so continue to plant, 'till the Ground is full. At the End of six or seven Months, which is the Time that they begin to raise their Stalks, they take care to cut for the Preservation of the Sugar, otherwise there would be a great deal lost. These Stalks are what the *Savages* very much use to make their Bows of.



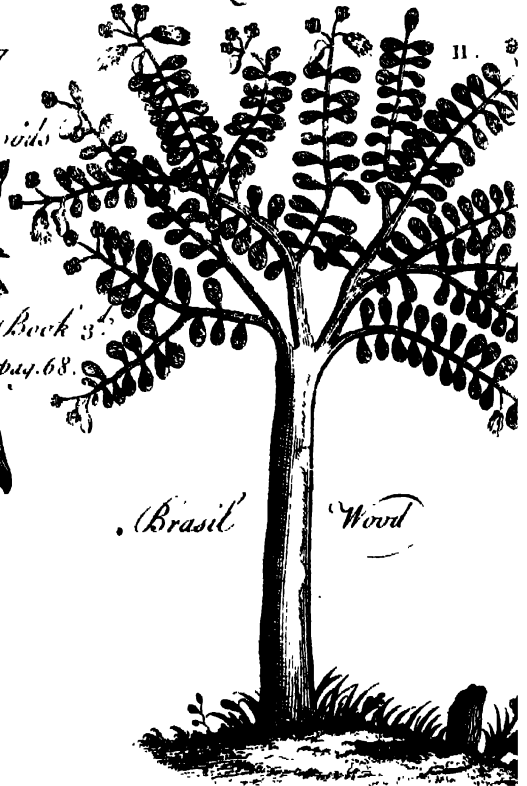
(Book 2^d
of Roots.)

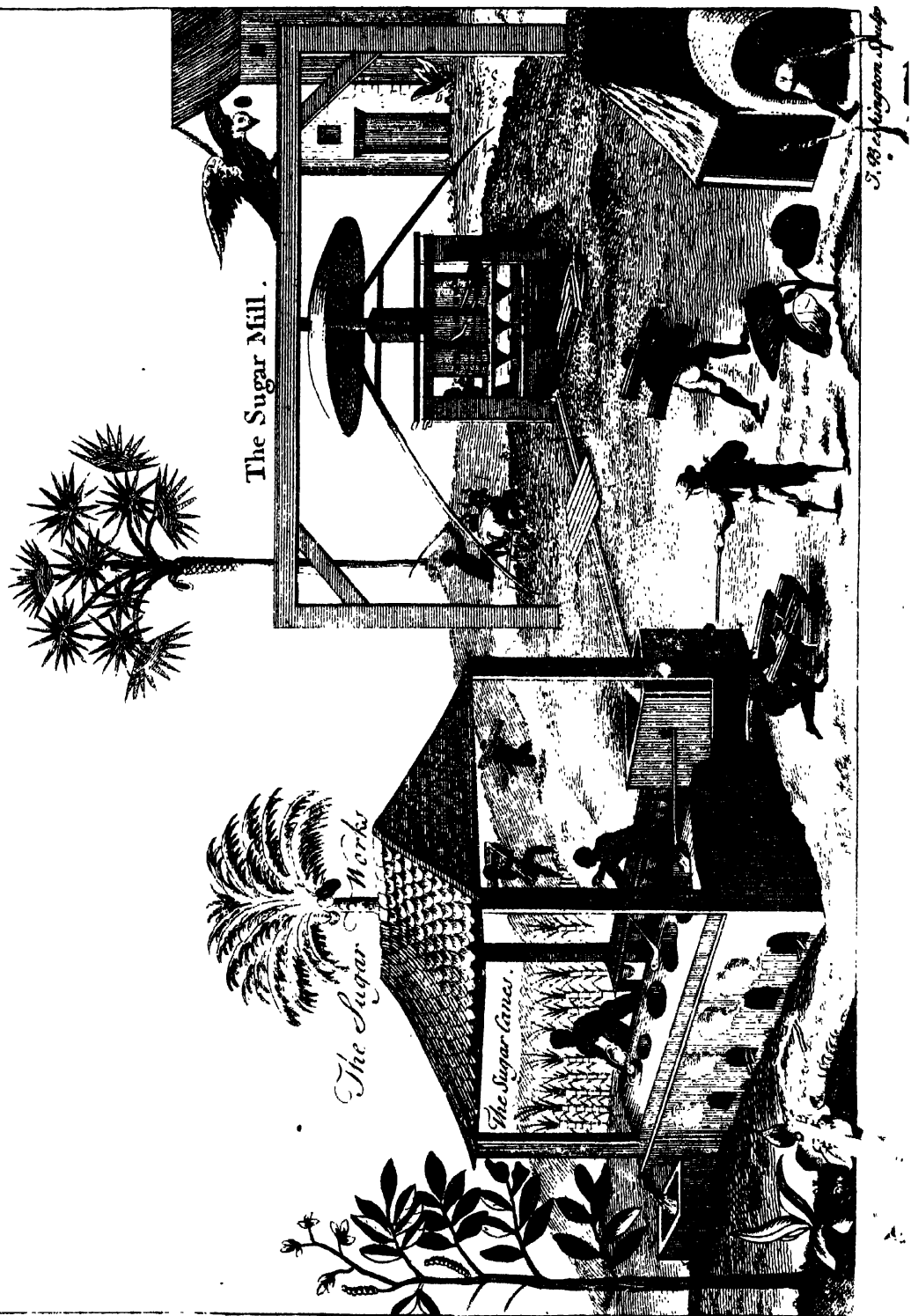


Calamus Aromaticus



(Book 3^d
pag. 68.)





39. *The Manner in which Sugar is drawn from the Canes.*

THE *Americans* having cut their *Canes* above the first Joint, and freed them from their Leaves, make them into Bundles, and carry them to the Mill, which is compos'd of three Rollers of an equal Size, and equally arm'd with Plates of Iron, where the Canes are to pass. The Roller in the Middle is rais'd much higher than the rest, to the End that the two Poles, which are affix'd cross-ways at the Top, and to which the Beasts are yoke'd, may turn about freely, without being hinder'd by the Machine. The great Roller in the Middle is surrounded with a Cog, full of Teeth, which bite upon the Sides of the two other Rollers adjoining to it, which makes them turn about, grind and bruise the Canes, which pass quite round the great Roller, and come out dry, and squeez'd from all their Juice. If by Accident the *Indian*, or whoever feed, the Mill with Canes, should happen to have his Fingers catch'd in the Mill, they must immediately cut off his Arm, lest the whole Body should be drawn in and ground to Pieces. Therefore as soon as they see any one have his Finger or Hand catch'd, the Person standing by cuts off his Arm with a Hanger, and he is afterwards cur'd, and kept for other Service. The Juice falling into a Vessel which is below the Mill, and being drawn off, runs by a little Channel into the first Boiler, which holds about two Hog-heads, where it is heated by a small Fire, and set a boiling, in order to make a very thick Scum arise: The *West-Indians* keep this Scum to feed their Cattle with. This Liquor being well scum'd is put into a second Boiler, where they make it boil again, throwing in, from Time to Time, warm Water, in which they have beat up some Eggs. Having been thus purified, they pass it through Strainers; and, after it has done running, put it into a third Boiler, which is of Brass or Copper, and then again, upon another refining, into a fourth Boiler; and when it begins to cool, and they find it rises to a Grain, they pass a Scimmer, or a wooden *Spatula* underneath it, from the Right to the Left, to see what Quality the Graining is. The Sugar being thus ready, while it remains hot, is cast into Moulds, or Earthen Pots, with Holes in their Bottoms, yet shut: At the End of twenty-four Hours, which is the ordinary Time the Sugar takes to incorporate, the *Negroes* carry the Pots into their Warehouses; and after they have open'd the Holes, and pierced the Sugar, they set the Moulds upon little Pots or Jars, in order to receive the Syrup, or Molasses, which

runs from it. When the Syrup is run from the Sugar, they take it out of the Moulds, and cut it afterwards with a Knife; and this Sugar cut in this Manner, is call'd the grey *Muscavado* Sugar; which, to be in its Perfection, ought to be of a whitish Grey, dry, the least Fat, or smelling of the Fire that may be. This *Muscavado* is the Basis and Foundation of all the other Sugars sold among us.

It is but little in Use, though very proper to make Syrups and colour'd Confects.

Of Cassonade, or Powder Sugar.

The *Cassonade* is made from the grey *Muscavado* run again; and, after it has been clarify'd, strain'd and boil'd, and cast into the Moulds, and so prepared as we have been speaking before. After the Syrup is drain'd out, they lay upon the Sugar about an Inch Thickness of Clay, wetted with common Water, that the Moisture which is in the Clay may get through the Sugar, and take away with it whatever fat or bad Matter might remain in it: When it will run no longer, and the Clay at the Top is dry, they take the Sugar out of the Moulds, and cut the Cakes into three Pieces, the Top, the Middle, and the Bottom, which they dry separately, according to their Fineness. The finest Powder Sugar is that of *Brasil*, which is extremely white, dry, and well grain'd, of a Violet Taste and Flavour. The *Cassonade*, or Powder Sugar, is much in Use among the Confectioners; above all, that of *Brasil*, by reason that it is less subject to candy; upon which Account the Confectioners value it the more.

The Sugar, which we improperly call Sugar of seven Pounds Weight, because it as often weighs ten or twelve, is made of the grey *Muscavado*, form'd into Loaves, as we have describ'd before. The Sugar of seven Pounds is distinguish'd into three Sorts, to wit, the white, the second, and the last, which is of a browner Colour; the whiter the Sugar is, the better stor'd, grain'd, and drier the more it is esteem'd. The less the Moulds are, that is, the less the Loaf is made, and the whiter it is, so much the dearer it is.

The Use of this is to make choice Syrups, white Confects, and to preserve *Apricots*, and the like.

Of Sugar-Royal, and Demy-Royal.

The Sugar call'd *Royal*, from its extraordinary Whiteness, is made from the small white Sugar, or Powder-Sugar, of *Brasil*, melted and cast into a Loaf as the former. This *Sugar-Royal* ought to be extremely white throughout the Whole; that

is to say, as fine at the Top as the Bottom, of a clear, compact, shining Grain, notwithstanding easy to break; which is the general Observation of Sugars, that are well bak'd, and of a kindly Sort. We sell besides, another Sort we call *Demy-Royal*; which is a small Sugar-Loaf, very white, and wrapp'd in a blue Paper, which comes from *Holland*.

The *Dutch* formerly brought us Sugars of eighteen and twenty Pounds, wrapp'd in Palm-Leaves instead of Paper; for which Reason it was call'd Palm-Sugar, which was a white fat Sugar of a good Sort, and a Violet Taste. We used to have besides another Sugar from the *Madeiras*, but we have no more of it now, because we have it from several other Islands much better.

Of Brown Sugar.

This Brown Sugar is one Sort of the *Muscavado*, which they turn to Powder Sugar, and is made of the Syrup of the Seven-Pound Sugar, after the same Manner as the others are made. It ought to be of a greyish red Colour, dry, and not smelling of burning; for there is some to be met with so moist, and with so much of the burnt Smell, that it is almost impossible to use it. The Use of the Brown Sugar was formerly very considerable, in that it serv'd to put in Clysters: At present several Apothecaries, very improperly, imploy it to make many of their Syrups with, which must be very disgustful, by reason of its nauseous Taste, and its near Alliance to the Molasses themselves, which some call the Syrup of Sugar, and which never ought to be used in Physick; great Quantities of it are used in *Holland* to temper Snuff with, and to sell to poor People instead of Sugar: I have been assured, however, that Molasses are better for distilling Rum than the *Muscavado* Sugar.

Of White and Red Sugar-Candy.

The White Sugar-Candy is made of the white *Lisbon* Sugar, melted and boiled to a Candy thus: Dissolve your Sugar in pure Water, then boil it to the Consistency of a Syrup, which pour into Pots or Vessels, wherein little Sticks have been laid, in order that the Sugar may stick to them during the fifteen Days that it is in the Stove; but the great Care must be to keep the Stove Fire equal during these fifteen Days that it remains there; they afterwards take it out of the Stove to drain and dry it, and then put it up in Boxes for Use.

Chuse this Sugar-Candy white, dry, clear and transparent. The very finest Candy we have

comes from *Holland*, and it is sold for Four-pence or Five-pence a Pound dearer than that of *Tours*, *Orleans*, *Paris*, and other Places. This Sugar-Candy is esteem'd good to moisten the Breast and cure Rheums.

The Red Sugar-Candy is made the same Way with the White, except that this is made with brown *Muscavado*. Both Sorts are better for Rheums, Coughs, Colds, Catarrhs, Asthmas, Wheezings, &c. than common Sugar; because being harder, they take longer Time to melt in the Mouth; and withal keep the Throat and Stomach moister than Sugar does. Put into the Eyes in fine Powder, they take away their Dimness, and heal them being Blood-shot; also they cleanse old Sores, being strew'd gently upon them.

That Red Sugar-Candy is best which is made in *Holland*, and is the driest and reddest.

Of Barley-Sugar, White and Amber-colour'd, Sugar of Roses, Pastiles of Portugal, &c.

Barley-Sugar is made either of white Sugar or brown; the first Sort is boil'd 'till the Sugar becomes brittle, and will easily break after it be cold. When it is boil'd to a Height, cast it upon a Marble, that is first lubricated with Oil of Sweet Almonds; and afterwards work it to a Paste, in any Figure you fancy. The other Sort, improperly call'd Barley-Sugar, is made of Cassonade, or coarse Powder Sugar, clarified and boil'd to a Toughness that will work with your Hands to any Shape, and is commonly made up in little twisted Sticks. This Kind of Sugar is more difficult to make than the other, because of hitting the exact Proportion of boiling it to such a Height that they may work it as they please: This ought to be of a fine Amber-Colour, dry, new made, and such as does not stick to the Teeth: Some Confectioners, to make it of a fine Colour, stain it with Saffron.

Sugar of Roses is made of white Sugar clarified, and boil'd to a Consistence of Tablets, or little Cakes, in Rose-water, and so cast into what Form you like best.

The Pastiles, or Portugal Lozenges, are made the same Way, of the finest Sugar that can be had, made into a Paste with Gum *Tragacanth*, to which is added some Ambergrese, or any other Perfume, most grateful to the Maker's Fancy.

Of Sugar-Plums.

There are infinite Variety of Flowers, Seeds, Berries, Kernels, Plums, and the like, which are, by the Confectioners, cover'd with Sugar, and bear the Name of Sugar-Plums, which would

would be endless to set down, and are too frivolous for a Work of this Nature : The most common of the Shops are Caraway-Confects, Coriander, and Nonpareille, which is nothing but Orange-Powder, cover'd with Sugar ; and what is much in Vogue at *Paris* is green Anise : Besides these, we have Almond-Confects, Chocolate, Coffee, Barberries, Pistachia Nuts. &c. Orange Chips and Flowers, Lemon-Peel, Cinnamon, Cloves, and many other Roots, Barks, Fruits, Flowers, &c. too numerous to speak of, together with Pastes, liquid Confections, and the like ; many of which are useful in the Apothecaries Shops, as green Ginger, Oranges, Jelly of Barberries, &c.

Of Spirit and Oil of Sugar.

Beside all the other Uses that we make of Sugar, there is an acid Spirit drawn from it, by Chymistry, with the Help of *Sal Armoniack*, which, after Rectification, is a powerful Aperitive, and proper for many Diseases, as the Gravel, Dropsy and Dysentery. The Dose is as much as is sufficient to make an agreeable Acidity in any convenient Liquor proper to the Distemper. As the Oil of Sugar, even after Rectification, is a black stinking Oil, I shall direct you to another Sort, which, strictly speaking, is not an Oil, but rather a Liquor of Sugar, *per Deliquium*. This is made by putting Sugar into a hard Egg, and setting it in a cold Place, to run into a Liquor, the same Way that Oil of Myrrh is made ; and is used to beautify the Face, or inwardly to remove Pains in the Stomach.

Sugar, in Latin *Saccharum*, or *Suc-Lemery. charum*, *Zaccarum*, or *Zuccharum*, is an essential Salt, of a Kind of Reed, call'd *Arundo Saccharifera*, or the Sugar-Cane, which grows plentifully in many Parts of the Indies, as in *Brazil*, and many other Places. This Plant bears on each Joint a Cane of five or six Feet high, adorn'd with long, straight, green Leaves, and carries on its Top a Silver-colour'd Flower, like a Plume of Feathers.

The Juice of the Canes is made by pressing them through the Rowlers of a Mill, from whence there runs a great Quantity of sweet pleasant Juice, which being put into Boilers, the very Part is, by the Force of the Fire, evaporated, 'till it comes to a Consistency ; after which they cast it into a Mixture made of certain Ingredients, fit to cleanse and prepare it for graining. All the Time it is boiling, with large Copper Scummers they take off the Scum, which constantly rises in great Quantities, until it be fit to empty into Coolers, *viz.* 'till it arrives to its just Body : From the Coolers, it is again shifted into

Earthen Pots, with Holes in their Bottoms, and other Pots they call Drips, under them, for receiving the Molasses ; which, in about a Month's Time, will be separated from that which afterwards is call'd *Muscavado Sugar*, being of a pale yellowish Colour ; this is then knock'd out of the Pots, and put into Casks, or Hogheads, for Transportation.

The first Kind of *Molasses* is *ajpler* boil'd up again to draw from it a Kind of dusky, pale-grey Sugar, call'd *Panels*, or sent in Casks for *England*. From this Sugar there drips a second Sort of *Molasses*, which, with the Scum that arises in all the Boilings, together with the Washings of the Boilers, Coolers, Pots and other Instruments, is preserv'd in great Cisterns, where it ferments, from which they distill that famous Spirit call'd *Rum*, a noble Liquor, not at all inferior in Strength to *French Brandy*, nor yet in Goodness or medical Virtues, the Flavour or Palatableness being set aside, having an *Empyreuma*, from a fetid Oil it acquires in the Distillation.

The next Thing to be consider'd is, the Refining of Sugar, to wit, the *Muscavado Sugar* : which is thus : They put it into refining Coppers, mix'd with Lime-Water, where, as it boils over a gentle Fire, much Scum will arise, which is taken off constantly 'till it comes to a sufficient Consistency for mixing it with the Whites of Eggs, well beaten up, in order to clarify it ; this being done, it is boil'd up to a proper Height for refin'd Sugar, and so turn'd off into Coolers, from whence it is put into such Draining-pots as aforementioned, with their Drips : When those Pots have stood draining or dripping eight or ten Days, then Clay, properly temper'd, is put upon the Pots, which is renew'd as often as Occasion requires : This forces down all the *Molasses* ; so that in seven or eight Weeks Time these Sugars will be fit for Casking.

These *Molasses*, thus proceeding from refin'd Sugar, are boil'd up again, and all the former Work repeated ; from whence comes another Sort of white Sugar, call'd *Bastard White* : From this Sugar there drips a second Sort of *Molasses*, fit for nothing but the Still to make *Rum* of ; it is also to be observ'd, that little or nothing is wasted in the Refining, but you have it some Way or another ; for as much as the fine Sugar wants of its first Weight, you have it in the Scum and the *Molasses*, or Recrement running from it. After this Elaboration of Sugar for refining it is over, they put up in Casks or Hogheads that which is call'd Powder-Sugar, or make into Loaves what they call Loaf-Sugar ; both of which are esteem'd in Goodness according to the Number of Times they have been refin'd.

When Sugar has been but once refin'd, it is a little fat or oily: Now to refine it farther, it is dissolv'd again in Lime-Water, and boil'd as before directed, taking off the Scum all the while, &c. The Sweetness Sugar has, is thought to proceed from an essential, acid Salt, mix'd with some oily Particles, of which it consists; for if by Distillation we separate the oily Parts from the saline, neither of them will be sweet, but the saline will be acid, and the Oil insipid upon the Tongue, because it makes little or no Impression upon the Nerve of Tasting; but when the Acid is entirely mix'd with it, the Edges or Points of the Acid penetrate the Pores of the gustatory Nerve, and, by opening them, carry in the oily Particles, and make them also penetrate and irritate the Nerve, whereby the Sweetness of the Taste is produced.

The Powder-Sugar, or that which is less refin'd, makes a sweeter Impression upon the Tongue than the Loaf-Sugar, or that which is more refin'd; because it contains more oily or fat Particles, whereby it remains the longer upon the Taste: This makes some prefer the coarser before the finer, for Use and Sweetening. Sugar was first known or produced in the *East-Indies*, afterwards in *Barbary* and the *African Islands*, as the *Madeiras*, *Canaries*, &c. then in the *West-Indies*, as *Jamaica*, *Barbadoes*, *Nevis*, *Antigua*, *Montserrat*, as also in the *Spanish Indies*; lastly in *Europe*, as *Spain* and *Portugal*, but not in that Plenty as it is produced in the *West-Indies*. If you make choice of it from the Place, that from the *Madeiras* was formerly accounted the best; that from the *Canaries* next, and that from *St. Thomas's* last; but now our fine *Jamaica* and *Barbadoes* Sugar is inferior to none; and next to them is reckon'd the *Lisbon* Sugar, which is the fatter, and not so white. If you chuse it for Colour, the whitest is the best; then the next to White is that of the Cream Colour, or pale Yel-

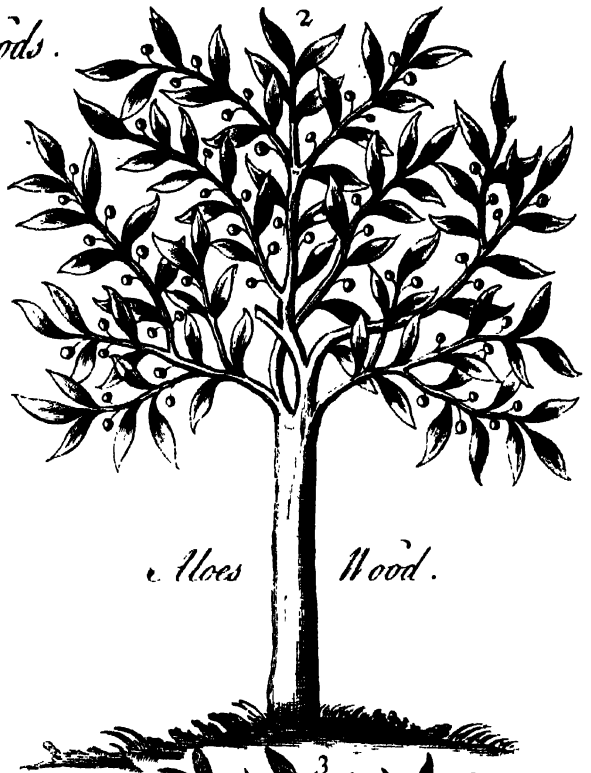
low; and lastly, the Red. If you chuse it from the Making, the treble refin'd is the best, and that which is form'd into the Loaf, the whitest of which will look like the driven Snow.

It is good for the Breast and Lungs, to smooth their Roughness, take away Asthma's, Hoarseness, ease Coughing, and to attenuate and cut tough Flegm, afflicting the Fibres of those Parts. It is very profitable for the Kidnies and Bladder, and in all the Cases aforementioned; but it is reputed bad for such as are troubled with Vapours and Hyfterick Fits, and therefore such Persons ought to avoid the Use of it. Refin'd Sugar is the sharper, and better to attenuate, cut and cleanse; but the unrefin'd to levigate and lenify, and so the better for the Lungs; but being constantly used, rots and decays the Teeth, and makes the Gums scorbutick. There are many Preparations, besides Confects and Sweet-Meats, made of Sugar; the chief of which are, first, Sugar of Roses; 2dly, Sugar of Violets; 3dly, Tincture and Liqueur, acid Spirit and Oil of Sugar, Sugar Penids, Essence of Sugar, and the like.

[The Plant which produces Sugar is the *Arundo Saccharifera*. C. B. Pin. 18. *Arunda Viba Brasiliensis* dicta. Pis. 1648. *Tacomara* sive *Arundo Saccharifera* Ejusd. 1658. It is of a middle Nature, between the arundinaceous and milaceous Plants. There is another Sugar call'd *Saccharum Acerum*, Maple Sugar, which is the Product of *Canada* and *New-England*, in which Countries the Natives collect the Juice of Maple Trees by Incision, and evaporate it to the Consistence of Sugar, which, while it remains unctuous, is better for internal Use than any other Kind, and the famous Syrup of *Maiden-Hair* of *Candia* is made with it: As it is brought to us it is of a greyish Colour, and tastes like other Sugar. The Inhabitants from this Sugar make Brandy, Vinegar, and a Liqueur which is their common Drink.]

The End of the Book of ROOTS.

of Woods.



BOOK the Third

OF WOODS

P R E F A C E.

WHAT we call Wood, is, according Mr. Grew, nothing but a *Multitude of very small Pipes, or hollow Fibres, some of which raise themselves erect, and form perfect Circles; and others run from the Circumference to the Centre, and there mutually cross one another, like the Lines of Longitude and Latitude on a Globe, or like a Weaver's Threads, extended both in Length and Breadth, and interwoven together. In Time these take their Nourishment from the Juices of the Earth, become hard and form the Bodies of Trees; which are more or less hard and heavy as they are ranged more or less close to one another, and more or less fill'd with Refin. The only Woods sold in the Shops are those used in Medicine, in Dying, or in Inlaying, of which only I shall speak, the others being not my Business in this Work.*

1. Of Wood of Aloes,

OF all the Woods sold in the Shops, we have none more precious, more valuable and rare, than the true Wood of *Aloes*; or *Xylocarpus*; upon which Account it is very little known, and every one is liable to mistake the Wood, which makes it easy to be counterfeited; It is indeed a difficult Matter to know it positively, it being describ'd so differently by different Authors: And I cannot think any more mistaken than those who write like M. de Furetiere, who says that *Aloes* is a large Tree that grows in the Indies very high; that the Trunk is of the Thickness of a Man's Thigh, on the Head of which is placed a vast Heap of thick indented Leaves, large at the Bottom, which narrow themselves to a Point, and are four Feet long. That the Flower is red, intermixed with yellow, and double like a *Fulvous*; and is supported by little Branches which arise from the Trunk, with the Leaves, among which they are hid: That from the said Flower comes a Fruit, round like a large Pea, white and red: And that they draw a Juice from these Leaves by slitting them with a Knife, which they put up in Shells of Gourds. And that when this is dried in

the Sun it appears a Kind of Refin: That the Wood is spotted, scented and bitter, and the Bark is so curious, that it resembles a Skin that is of a changeable Colour.

There are several Sorts of it, but the best is the *Agallochum* of India, which comes from Calcut. The finest is the black Kind, of a changeable Colour, full, heavy, solid and thick, which is not at all whitish, and is difficult to set on fire. I know not where M. Furetiere had the Account before recited, which conforms the Plant which produces the *Aloes* with the true *Lignum Aloes* Tree.

Others say, the Reason we have not the true *Aloes* Wood is, that it grows no where but in the terrestrial Paradise, and that it is impossible to have it but by the Means of Floods: And others, because it is not produced among us, except in Deserts and upon inaccessible Mountains; not only so from their Height, but because of the wild Beasts that inhabit them, as the Lion, the Tiger, the Panther and the like; besides a thousand other idle Stories that are told about it, too long to recount here; instead of which I shall declare what I have learn'd from some of the Retinue of the Embassadors to Siam, who brought some of this Wood as a Present to the late King of France, Lewis the Fourteenth. As well wrought as unwrought;

wrought; among the rest an Ewer, with its Silver, proper to wash Hands in, made at *Siam*, after the Mode of that Country. This Bason, though of Wood, is more valued than if it had been of massy Gold. They say that the true *Lignum Aloes* Tree grows in *Cochinchina*, in the Kingdom of *Loe* and in *China*, and is of the Size and Shape of the Olive Tree, having Leaves something of the same Sort, among which grows a little red Fruit, like our Cherry. A great deal of *Lignum Aloes* is brought to *Surat*, the most refinous of which is the most valued; it is distinguish'd by the Bigness or Smallness of the Pieces.

It is observable, that the Trunk of this Tree is of three Colours, which are no other than different Parts of the same Substance: The first Wood, which lies immediately under the Bark, is of a black Colour, solid, heavy, and almost like black Ebony; the *Portuguese* call this *Eagle-Wood*. The Second, which is a light veiny Wood, like rotten Wood, and of a tann'd Colour, is what we call *Calambouc*, or the true Wood of *Aloes*. The third Sort, which is the Heart, is the precious *Tamback*, or *Calamback* Wood; but the great Scarcity and high Price of it is the Reason why I shall say no more of it, having never seen any of it.

We ought to chuse the Wood of a shining Dye, and of a light Yellow within, bitter in Taste, especially when it is held some Time in the Mouth, from whence it takes the Name of *Aloes-Wood*, because it has a Bitterness like that of the *Aloes*. It should be light and porous, like rotten Wood; and when put into the Fire, burn like Wax and yield a sweet Smell.

This Wood of *Aloes* has no Use that I know of but in Phylick. It is very aromatick, cordial and cephalick, as also a Destroyer of Worms: Its principal Use is in some Galenical Compositions. As to the *Eagle-Wood*, it is of no Use in *France*; it serves the *Indians* to make their small Wares with and their Weapons, and it is so scarce in *France* that it is not easy to find any of it; which is quite contrary to the Opinion of those who have writ of it, and say that it is very common. Besides the *Columback-Wood*, or true *Aloes*, we have Quantities enough of other Kinds brought to us, which bear the same Name; but as it is impossible for me to discover all the Differences, I shall inform you, that you ought to reject all others whatsoever that are not the Wood we have been speaking of, which is entirely different from others, both in Shape and Figure, in that the pretended Woods of *Aloes* are in great heavy Pieces, sometimes Red, sometimes Green, and likewise of several other Colours; and what makes it

easier to know the Difference is, that the true *Columback* is commonly in flat light Pieces. Some People will have it that the *Aur Vita*, or *Thuya*, which is at *Fontainebleau*, and in the Royal Garden at *Paris*, is the Tree that yields the *Aloes-Wood*; but I have prov'd it otherwise, as I had one of those Trees three Years, at the End of which Time it died, and I had it taken up; after having exposed it to the Air some Time, the strong Smell and Taste it had while growing was quite lost, and it became extremely light, of an insipid Taste, and white without and within.

Aloes, *Agallochum*, *Xyloaloes*, or Wood of *Aloes*, is brought from *Bantam* in *Lemery*, the *East-Indies*, where they call it *Columback*. It comes to us in Chips, and is of a most fragrant Smell and darkish Colour; the knotty, refinous and blackish Sort, which is many times full of black Resin, like *Aloes*, is reckon'd the best; or that which is of blackish Purple, with Ash-colour'd Veins, of a bitter Taste and heavy: The chief Sign of its Goodness is, that the Chips being put into Water will swim, and when burning on Fire-Coals they will sweat or fry, afford a sweet Scent, and leave Bubbles behind them, not easily vanishing. It is hot and dry, cephalick, neurotick, stomachick, cardiack, alexipharmick, strengthens the Brain, Heart, Nerves, spirits and whole Body; is excellent against Faintings and Swoonings, and kills Worms by its Bitterness. Dose in Powder, half a Dram to a Dram. The Chymical Oil is likewise used like that of *Rhodium*, and sometimes internally to the same Purposes as the Wood.

[This is the *Lignum seu Arbor fragrans Siamensis Kiffina*, Latinus *Arbor Aquilæ* & *Aloes dicta cuius fragrans Lignum appellatur Agallochum*. Kemp. Amen. 903. *Agallochum verum*. Eph. Germ. Dec. 2. p. 74. We account that the best which is of a blackish Purple Colour, and so light as to swim upon Water; but there is scarce any such now to be found; for the best we meet with will sink in Water. The Juice of this Wood, while growing, is poisonous and caustick, and often deprives the People employ'd in cutting it of their Sight. It has been greatly esteem'd, but of late is grown into Disuse.]

2. Of Asphaltum, or Rose-Wood.

OUR *Asphaltum* is a Wood which was as little known to the Antient, as the true *Aloes-Wood*, and which at present we only know by Relations, which we cannot absolutely depend upon.

I have never been able, with all the Diligence I could use, to get clearly at the Truth, and can therefore

therefore only declare what I have learn'd, which is, that *Asphaltum* is the stringy Pieces of a small *Chinese* Tree, something like *Calemba*; they are solid, of a reddish Brown, sometimes mark'd with whitish Streaks, hard and bituminous, thicker, of a looser Texture, and less firm than the *Lignum Aloe*, of a bitterish, fat and resinous Taste, and weak Smell.

The Shrub is thorny, it grows on the Mountains, and is by some accounted poisonous.

There are several Species of the *Asphaltum* describ'd by the Antients which are not to be found, and are hardly known among us. The *Asphaltum* Wood of the Antients was used in perfum'd Ointments; they boil'd the Wood in Oil, by which the Resin was extract'd, and then used the Oil.

Asphaltum, according to the Accounts of the *Chinese*, is gather'd in the same Manner as the *Lignum Aloe*, for they take only the more fragrant and resinous Pieces.

There are three Sorts of Wood that bear this Name. The first is a blackish Wood, which I believe to be the true *Eagle-Wood*. The second is a Wood something bitter, heavy, oily, full of Veins of different Colours, which, all mix'd together, make it a reddish Wood: It is cover'd with a grey Bark, thick and very rugged. As to the Figure of the said Tree, the Leaves, Flowers, Fruit, and Country where it grows, I have been able to learn nothing. Whether this be the false or true *Asphaltum*, it is what is most receiv'd for genuine, by those who are supposed to know it the best, and is what we commonly sell.

The third *Asphaltum-Wood* is as known and common among us, as the two before mention'd are unknown and scarce. This third Sort is what we call *Rhodum*, or *Rose-Wood*, because it has a Smell altogether resembling that of Roses. The *Rose-Wood* is of a pale brown Colour; it is brought from several Parts of the *Levant*, but chiefly from the Isle of *Rhodes* and *Cyprus*, from whence it takes the Name of *Rose* or *Cyprus-Wood*.

Father *Tertre*, however, will have it that there is a Difference between the *Rose* and *Cyprus-Wood*; he says, that which is call'd *Rose-Wood* in *Guadaloupa*, is properly that which the Inhabitants of *Martinico* call *Cyprus-Wood*. It is very certain that there are two Sorts of *Rose-Wood* which we confound together by that Name, without making use of that of *Cyprus*. The two Trees so exactly resemble one another, in Height, Size, Bark, Leaves, Flowers and Smell, that most Part of the Inhabitants mistake one for the other: I have, notwithstanding, seen some curious People of *Guadaloupa*, who have call'd this Wood, which

the Inhabitants of *Martinico* call *Rose-Wood*, *Marble-Wood*; because the Heart of the Wood is stain'd like Marble, with White, Black and Yellow, which is the only Distinction I could observe. This Tree grows very high and straight, with long Leaves like the Chestnut, but more pliant hairy and whiter; it bears large Clusters of small white Flowers, and after them little smooth black Seeds; the Bark of the Wood is whitish, and almost like the young Oak; in working on it, it sends forth a Smell so sweet that the Rose cannot compare with it. This Wood loses its Smell in time, but it recovers it again upon being fresh cut, or strongly rubb'd one Piece against another. It is very good to build withal. It ought to chesenew, dry, of a yellowish brown Colour and a Rose-like Smell, and in the largest and evenest Pieces that may be.

This Wood is used to make Beads of, and is of some Use in Physick, by reason of its fine Smell; it is serviceable to the Distillers to make *Rose-Water*, or at least to give their *Rose-Water* a good Scent. The Surgeons and Barbers use it in Decoctions and Tinctures for their several Purposes. Some People employ this like *Yellow Sanders*, and after it is reduced to Powder mix it up in Pastiles for burning. The *Dutch* draw a white Oil from it very odoriferous, which they transport abroad under the Name of *Oil of Rhodium*, and which we sell upon several Occasions, as to the Perfumers and others. 'Tis observable that this Oil, when new, is like Oil of Olive; but after some Time it becomes of a dark Red. The Wood, by Distillation, yields a red Spirit, and a black fetid Oil, which is proper for curing of Scabs and Tetters.

There are several Sorts of the *Asphaltum* that are not distinguishable but *Lemery* by the Curious, as the *Aloe-Wood*, that is call'd the *Eagle*; and the *Lignum Rhodium*, which is so call'd, not that it bears Roses, or is a Rose-Tree, but from the Flavour and Fragrancy of the Wood, and the odoriferous Oil it yields. This is brought from the *Levant*, and some from the *Canaries*; the best is the fattest, or most oily, of a deep yellow Colour, inclining to Red, strong scented if broken, and of a compact heavy Substance. This Wood contains two profitable Bodies, the one spiritous and watry, and the other oily and sulphureous; both which are very subtle and volatile. To make the Oil, chuse the weightiest and best scented Wood, rasp'd finely, of which take four Pounds; Saltpeter one Pound; infuse them in Rain-Water eight or ten Days, and draw off the Oil in proper Vessels. There is at the same Time a Water drawn from thence, which may be used as *Rose-Water* for Perfumers, and

for a Vehicle where proper. The Oil, which is clear, fair, yellowish, and of a fragrant Smell, is used inwardly against Obstructions in the Kidneys or Bladder, freeing them from Sand, Gravel and slimy Matter, that load and stop up the Passages. You may make it into an *Electuarium* with refined Sugar, and then dissolve it in its own Water, or any proper Diuretick. It is used with good Success in Gargles, and to cleanse and cure Ulcers in the Mouth, or other Parts of the Body. It is cephalick, neurotick, cardiack, antispasmodick, and arthritick, and may be given from three Drops to ten or twelve. This Oil, besides all its internal Uses, is accounted one of the strongest vegetable Perfumes, and holds its Odour the longest.

[This, and not the Lignum Aloe, is the true *Calambac-Wood*; it is the *Asphaltum*, Mon. Exot. 7. *Agallacbum Prasantissimum*. Jons. Dendro. 460. It is brought to us from the *East-Indies* and the *Canaries*. The Antients varied so much from one another in their Accounts of this Wood, that it is probable they have described different Woods under this Name. It has been much in Esteem, but is now never used unless in the Oil to scent Pomatums, &c.]

3. Of Sanders.

Pomet. THE Sanders are three Sorts of Woods of different Colours, Smell and Figure; all three, as I have been assured coming from the same Tree, and having no other Difference than from the different Countries where they grow. This Tree grows about the Height of our Wallnut-Tree, having Leaves like the Maltich; it bears a small Fruit, of the Size of a Cherry, green at first, and black when ripe, after which it easily falls off the Tree, is of an insipid Taste and no Value.

The yellow Sanders is brought to us from *China* and *Siam* in Billets, freed from the Bark; the *French*, when they return'd from *Siam* in 1686, brought with them a good Quantity. Chuse the heaviest Wood, of a good Scent and yellow, from whence it is call'd *Citrine Sanders*, which signifies yellow; but take Care, at the same Time, you be not impos'd on with the *Citron Wood*, which is often sold in its Stead. The yellow Sanders is most used in Physick, and by the Perfumers.

The white Sanders is something like the yellow, but not having the Colour or the Smell, it makes a vast Difference. This Wood is brought in Billets, divested of its Bark, from the Isle of *Timor*. Chuse such as is heaviest, white, and of the best Smell you can get. It is used in Physick as the yellow.

The red Sanders is brought to us in thick long Billets, from the Maritime Places on the Coast of *Coromandel*. Chuse that which is blackish without, of a deep red within, hard to cleave, of an insipid Taste, and almost no Smell; and take care you do not get Coral-Wood, which is often sold in its place, which I shall mention by and by.

The Sanders are something astringent, especially the red; they fortify the Heart and Stomach, and purify the Blood, they are given inwardly in Pysims, or in Powder from half a Dram to a Dram, and are Ingredients in many Compositions.

There is beside these a fourth Sort of Sanders, call'd *Taffety-Sanders*, or Sanders of *Constantinople*, which serves to give a red Stain, boil'd in Water with any Acids; like the red.

Of the Citron-Wood.

The Citron-Wood, which the Americans call *Candle-Wood*, because being cut into Splinters it gives a Light, which they use to light themselves by, is the Trunk of a large thick Tree, that grows very common in the Leeward-Islands. This Tree is very beautiful to the Eye, having many large and long Branches, full of Leaves, like those of the Bay-Tree, but bigger, and of a more shining green; and Flowers like the Orange, of a Jessamine Smell, after which grow little black Fruit, of the Size of Pepper. It is the Trunk of this Tree, that the Reverend Father *Du Ten* has falsely imagin'd to be the yellow Sanders, and which afterwards gave Occasion to certain Drug-gists at *Rouen* to buy of the Company, and sell it boldly again for the true yellow Sanders, to those who understood it not, or would buy without seeing it, or upon their Words, for the true Wood; or they would sometimes shew a Sample of the true yellow Sanders of the *Indies*, and afterwards sell this *Citron*, or false Sanders. The Cheat of this is easy to discover, in that the true Sanders tastes and smells sweet and agreeable, and is but moderately heavy and resinous; but, on the contrary, the Citron-Wood, which is heavy and oily, has a strong Smell, like the Citron, from whence it derives its Name; and further, the Billets of the true Sanders weigh not above a hundred Pounds, and those of the Citron near a thousand. This Wood is of no Use in Physick, but is very useful to work into proper Utensils; for after it has been exposed some Time in the Air, it will look like polish'd Cocoa. The Gum of the Citron-Wood is very fragrant; and what is most remarkable, is, that the older the Trees, the sweeter is the Gum.

This Wood likewise bears the Name of *Yessamine-Wood*; There grows, besides, in these Isles, another *Candle-Wood*, which has such Leaves, Flowers and Fruit as the *Citron-Wood*, except that the Flowers are more fat, much thicker and rounder; but as this Wood comes not to us, I shall say nothing further, but that Father *Du Tertre* says, that this Tree is scarce, and grows no where but on the Sea-Side, and believes it to be a Kind of *Alnus-Wood*. He observes likewise, that this Tree yields a very odoriferous Gum, and that the older the Tree is, the better it smells; and that the Savages make no other Use of it but for Lights; except that they use the inner Rind of the Bark, from whence they press a Juice, valued by them as a sovereign Remedy for Inflammations of the Eyes.

Of Coral-Wood.

Besides the *Candle-Wood*, we have brought to us, from the *Leeward-Islands*, a certain red Wood, which they call *Coral-Wood*: It is with this Wood they counterfeit the true red Sanders; but that which makes it not difficult to discover the Difference is, that the *Coral-Wood* is of a shining Red, light and stringy; but the true Sanders is of a deep Red, without Threads, and very heavy.

The *Americans* use the *Coral-Wood* for several Sorts of Work. Besides this, in these Isles there grow two other Kinds of Trees, which bear the Name of *Coral*, because their Fruit are red, like *Coral*, except that on the Right Side of the Bud they have a little black Spot. This Fruit is what we call and sell by the Name of the *red American Pease*, which are extremely bitter, and some pretend that these Fruits, moisten'd with the Juice of Citrons, have the Quality of soldering Gold and Silver, like Borax.

Father *Du Tertre* says, that there are so many red Woods in these Isles, that in every ten Leagues they are found of different Colours, some deeper, some paler, and that they are all very full, heavy, solid, and excellent for making the best Joyners Work; the Wood being, for the most Part, not subject to decay.

Santalum Citrinum, Album vel Rubrum, the yellow, white, or red Sanders, are exotick Woods, brought from both the *Indies*, of a very fragrant and sweet Smell. The *yellow* is to be chose before the rest, and that which is of the most agreeable Odour, heavy and knotty. Both this and the *white* are used in Faintings, Swoonings, Palpitation of the Heart, Obstructions of the Liver and Spleen. They are good against vomiting, and dry up Catarrhs;

outwardly the Fume prevails against the Head-ach, stops Fluxes and Rheums of the Head, with other preternatural Effluxions.

The *red Sanders* is also brought from the *Indies*, being a red heavy Wood, and commonly sold in the Apothecaries Shops in Powder: It is cooling and more astringent than any of the rest; is used in Catarrhs, to stay thin Rheums falling down upon the Lungs, and to abate the Heat of Fevers, to stop Fluxes, and the *Profluvium seminis*, with the Gonorrhœa in either Sex: But the chief Use of it, this Day, among us, is to colour Medicines with, as *Lucatellus Balsam*, and other Balsams, Tinctures, and the like.

[It is generally supposed that the *white* and *yellow Sanders* are the Wood of the same Tree, the inner Part or Heart being the *Yellow*, and the Outer the *White*, though there are some who say they are the Wood of different Trees. They are the *Santalum Album* and *Citrinum* of Authors. The Tree which is believ'd to produce them both, has Leaves like the Tamarind Tree, composed of a Multitude of small Leaves, set on both Sides of one Middle Rib; the Flowers are of a bluish Black, and the Fruit of the Bigness of a Cherry. They are both brought to us from the *East-Indies*.

The *Red* is a Species of the Brazil Wood, it is brought to us from the *East-Indies*; the Tree which bears it grows beyond the *Ganges*. Its Leaves are like those of the Ash, and its Fruit contain'd in Pods, thick, bivalve, broad at the End, and the Seed itself oblong.

The Labourers who cut this Wood are often seiz'd with malignant Fevers and Deliria of a very singular Kind, the affected Person generally imitating the Actions of his Trade: And they have also a *Fumus Camina*, of a very terrible Kind.]

4. Of Nephritick Wood.

THE *Nephritick Wood* is brought to us from *New-Spain*, chiefly from *Pomet*, the Kingdom of *Mexico*, where it is call'd *Coult* and *Tapalcopathy*, and by us *Nephritick*, by reason it is a sovereign Remedy in Stone, Gravel, and Difficulty of Urine. It is a Tree like our Pear-Tree, having Leaves like Chick-Pease, but much less.

Chuse the Wood well freed from the thick Bark, which is of a bitterish Taste, and yellowish red, and being put into a little cold Water, strikes a fine Sky-colour'd blue, which is a certain Sign of its being true. They sell in the room of this a red Ebony, or Granadilla, which is readily distinguish'd from the other, in that it is of a

deeper red, and by infusing it in Water, it gives a yellow Colour, like another Wood we have brought also to us from the *Indies* and *Brasil*, the Name of which we have not yet learn'd; however, you must be careful of some of Woods that are sold for the true *Nephritic*, if they will not yield a blue Tincture. This Wood, infused in Water, is frequently used by Persons afflicted with the Stone or Gravel for their Drink, and to mix in their Wine. There will be no need to add the Virtue of the Wood, but add Water thereto, with a little Oil of Worm-wood, that is to say, about half a Dram to a Glass.

It is also good for Obstructions of the Liver and Spleen, infused in Wine or given in Sticks, or in Powder, in any proper Liquor; the Dose is from half a Dram to a Dram in Powder, and from two Drams to half an Ounce, or more, in Infusion.

The *Nephritic Wood* is thick, without Knots, white without, and blueish within, which, by Infusion, makes a sky-colour'd Liquor; therefore, to avoid being deceiv'd when you buy it, scrape some of the inner Parts of the Wood, put it into Water, and let it stand four or five Hours; if it turns the Water into a blueish Tincture, it is right and good; but if not, and of a yellow Colour, it is false. It grows in *America*, and is brought from *Mexico*, and other Places of the *Spanish West-Indies*. It is call'd *Nephriticum*, because it is a Specifick in Disorders of the Reins and Bladder. *Schroder* says, it grows like a Pear-Tree, and is a Kind of Ash. It is hot and dry, opens Obstructions of the Liver, Spleen, Reins and Womb; cures all Stoppages of Urine, whether in the Kidneys, Ureters, or Bladder, bringing away Sand, Gravel, Stones, or other tartarous Matter generated in those Parts.

[This is the Wood of the *Balanus myrsifera fructu glans Unguentaria*. G. Em. 1433. *Nux Ben fructu glans Unguentaria*. Park. 238. It grows in both the *Indies*; the Leaves are like those of the Ash, but of a deeper green; the Flower five leav'd; the Fruit is a Kind of trivalve Husk, full of a white firm Substance, enclosing triangular Seeds. The Wood is reddish when fresh, but turns brown and loses its Virtue in keeping. The Infusion of it held in a Vial between the Eye and the Sun, is yellow, and held so as to keep the Eye between the Sun and it, is of a beautiful blue; the true Wood, therefore, may be rejected for staining the Water yellow, only because it is view'd in a wrong Light. The Wood is now not much used in Medicine. The Oil, which we call Oil of *Ben*, which is brought to us

from *Italy*, is made by Expression from the Fruit of this Tree, which is the *Ben Nutt* of the Shops.]

5. Of Lenticle, or Mastick-Wood,

THE *Lenticle* is a Tree which has Leaves like *Myrtle*, among which it bears Flowers, which produce small Berries, in Clusters, green at first, and blackish afterwards, as they ripen, there likewise grows on the Branches sometimes, a little Husk or Bag, full of Liquor, from which little flying Insects are generated, as from the Scarlet-Grain, or *Kermis-Berry*.

These Trees are very common in *Egypt* and the *Indies*, and particularly the Isle of *Chio*, where they are so industriously cultivated and watch'd, that a Man who cuts one of them down, whether designedly or not, even tho' he be the Owner, has his Hand cut off for the Offence, unless the Tree was old and past Service.

It is from this Tree that the Mastick runs, which I shall speak of presently. They plant a great many of these Trees in *Italy*, and the *Italians* make an Oil of the Berries, after the same Manner as we do the Oil of Bay-berries. This is used to the same Intentions as the Leaf and the Wood; the last of which they work into Tooth-pickers in *Provence* and *Languedoc*.

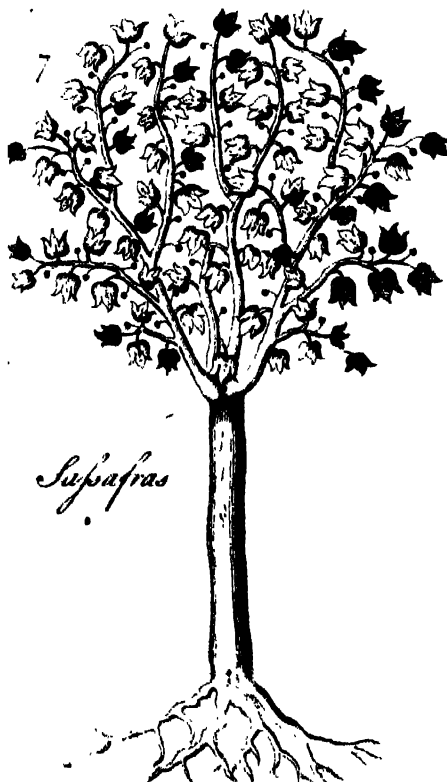
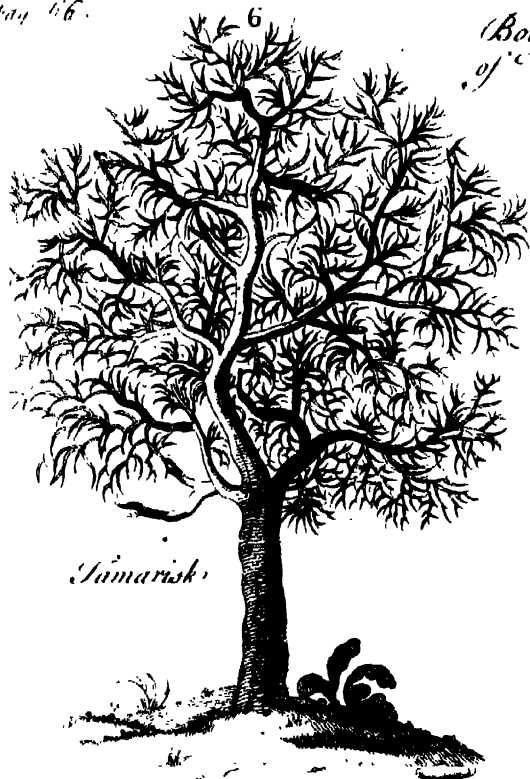
Chuse your *Lenticle-Wood* heavy, compact, and firm, that is, tough, or hard to break, grey without and white within, of an astringent Taste, and adorn'd with Leaves, if possible.

Of Mastick in Tear.

The *Mastick in Tear*, so call'd to distinguish it from that made of Resin, &c. is a resinous Gum, which drops during the great Heats, without Incision, from the large Branches, and the Trunk of the *Lenticle*; and sometimes likewise, after having been cut, the Tears fall from the Tree into a Receiver set for that Purpose.

Chuse such as is in the largest Tears, and which, being chew'd, becomes like white Wax. The best is that of *Chio*, being larger and of a more balsamick Taste, than that which is brought to us from the *Levant*, by the Way of *Marseilles*, which is almost the only Sort they have in *France*. *Mastick* is much used in Physick, and, among other Things to ease the Tooth-ach, and is used to several other Purposes, as the making of Varnish, &c. The People of the *Levant-Trade* deal ill with us, particularly in mixing their *Mastick* so as the worst lies at the Bottom and the best at the Top; but they will not sell the one without the other.

Lentiscus,



Lentiscus, the *Lentisk*, is a Tree full *Lemery*. of Branches, sometimes large and sometimes small, which are pliant, flexible, and cover'd with an Ash-colour'd Bark. The Leaves are like those of the Myrtle, rang'd by Pairs on the Side, and at last terminate with a single Leaf, always green, of a strong Smell, but not at all disagreeable; of a smart, astringent Taste: There grow oftentimes upon the Leaves certain little Bags or Bladders, fill'd with a Liquor. The Flowers grow upon Stalks arising from the Leaves like Grapes, reddish in Colour, tending towards a Purple; from whence arises the Fruit, which are small round Berries, black when they are ripe, and of an acid Taste, in each of which is contain'd a little longish Kernel, hard and black, having a white or green Pith in it. The Wood is brought dry to us, and should be chose fresh, difficult to break, heavy, and not subject to be carious or spongy: It contains a great deal of Oil, Flegm, and likewise essential and fix'd Salt; is astringent and cordial, resists Poison, and is excellent to strengthen and preserve the Gums.

The *Resina Lentisci*, or *Mastick*, is produced from this Tree, growing in *Syria*, &c. and brought to us out of *Turky*, from *Smyrna* and *Aleppo*; but the best is from *Chio*, which is of a light Colour, or white yellow, clear, and almost transparent, free from Dross or Filth, in Grains, Tears, or Drops, and sweet-scented, bright, pure, and friable, being easily reduced to Powder: It is a Gum-Resin, said, by some, to come from the same Tree with the *Chio Turpentine*. It is sometimes adulterated with *Frankincense*, and Resin of the Pine-Tree; but the Smell will easily discover the Cheat. The green-colour'd, blue, and impure, are not good; and the black, like Bitumen, is nought. It is hot and dry, subastringent, and strengthens the Stomach and Head, and is chiefly used against Vomitings, Loathing, and Fluxes of the Bowels. It corrects sharp Purges, hinders Vapours arising from the Stomach, which hurt the Head, strengthens the Nerves, cures spitting of Blood, Coughs, Colds, Catarrhs, and a stinking Breath. By chewing, it draws away Flegm from the Brain, and is used in a Plaster to the Temples for the Tooth-ach; in a Cataplasin for the Stomach, and as a Dentifrice for the Teeth. Dose, a Dram or two Drams in Powder, for the *Flux Albus*, or *Gonorrhoea*.

[The Tree is the *Lentiscus ex Chio ex qua fuit Mastiche*. Ind. Med. 73. *Lentiscus vera ex Mouta Chio cortice & foliis fuscis*. Cat. Hort. Ams. 192. It is common in the Island of *Chios*, it flowers in May and June; the Leaves are pinnated like the

Ash, and ever green; the Flowers stameneous, and growing at the Insertions of the Leaves. It is an Error to think this the same with the common *Lentisk*, or *Mastick-Tree*, as it is call'd.

The Wood comes over in slender knotty Pieces, but is seldom used now. The Resin or Mastick of the Shops is whitish when new, and grows yellower by Age. It is so much of the Turpentine Kind, as to deterge, and pass by Urine, as appears manifestly by its Scent.

6. Of Tamarisk.

THE *Tamarisk* is a Tree of a moderate Size, which grows plentifully in *Languedoc*, having very small *Pomet*. Leaves, and the Fruit in Clusters, of a blackish Colour, which the Dyers use instead of Galls.

Chuse the *Tamarisk-Wood* with the Bark, white without and within, of almost an insipid Taste, and without any Smell. They use it for Discauses of the Spleen, and make little Casks, Cups and Dishes of it, which are call'd *Tamarisk Ware*. Those who are troubled with the Spleen, used to fill those little Casks with good Wine, and, after it has stood some Time, drink it for their common Liquor; and they use the Cups and Dishes for the same Purpose, to drink out of. From this Wood is made a white Crystal Salt, call'd *Tamarisk Salt*, which is appropriated to the Cure of the Spleen, which, to be in its greatest Perfection, ought to be dry, in small Crystals, and not in Powder, as it frequently is.

Tamariscus, *Tamarix major*, five *Arboris Narbonensis*, the greater *Tamarisk*, or *Narbena-Shrub*, is a Tree of a middle Size, whose Bark is rough, grey without, and reddish within: The Leaves are small, long, round, slender, very like those of *Cypress*, of a pale green Colour; the Flowers growing at the Top of the Branches, disposed in Clusters, little, white, and purplish, each one being composed of five Leaves, which is succeeded by a lanuginous Fruit, that contains blackish Seed. The Root is thick, woody, and divided into several Branches. This Tree grows chiefly in the hot Countries, as *Dauphiny* and *Languedoc*, near Rivers and watry Places. It flowers three Times a Year, in Spring, Summer, and Autumn. All the Parts of the *Tamarisk* contain a great deal of Salt and Oil. The Bark, Root, Leaves, and Flowers are all used in Physick, to open Obstructions of the Spleen and Mesentery, excite Women's Courses, and to attenuate the tartarous and melancholy Humours.

[This is the *Tamariscus Narbonensis*. Ger. Emal. 1378. *Tamariscus folio tenuiori*. Pask.

1479. It is common in Gardens, and flowers in *May* and *June*; the Leaves are like those of the Cypress, or Heath, the Flowers grow in Spikes, and the Seeds are wrapp'd in Down. It is recommended for the Jaundice and *Fluxus Albus*, and *Etmuller* equals it to the *Sassafras*; but it is now very little used.]

7. Of Sassafras.

Pomet. THE *Sassafras*, or *Cinnamon-Wood*, call'd *Pavaume* by the *Indians*, is a Tree very beautiful to the Eye, which grows plentifully along the Coasts of *Florida*, where there are entire Forests of it. This Tree has a very strait Trunk, on the Top of of which there are several Branches charg'd with green Leaves resembling those of the Fig, which the Inhabitants make use of bruise'd to cure Wounds withal.

Chuse your *Sassafras* with the Bark reddish, thick and rough, that being the best Part of the Tree, as well for its acrid Taste, as its strong aromatick Smell, which considerably exceeds that of the Wood, especially when the Tree is standing. Upon this Account it was, that the first Time the *Spaniards* landed in *Florida*, they thought they had been *Cinnamon-Trees*, because of their aromatick Smell, which they might smell two Leagues Distance; they soon found their Error in that, but judging, however, that it was not without some Virtue, they brought of it into *Spain*, and it soon got into Use.

Several People prefer the Bark of this Tree to the Trunk and the large Branches, and that not unreasonably, because it is much more fragrant than the Wood; it is commonly light, reddish without and within, easy to break, of a very strong aromatick Smell and Taste; the Bark is better than the Root, and the Root better than the Wood. When they cut or rasp this Wood for Use, the Smell is so strong that it occasions the Head-ach in those that work upon it, as it likewise does in those that use it, which has much lessen'd its Credit.

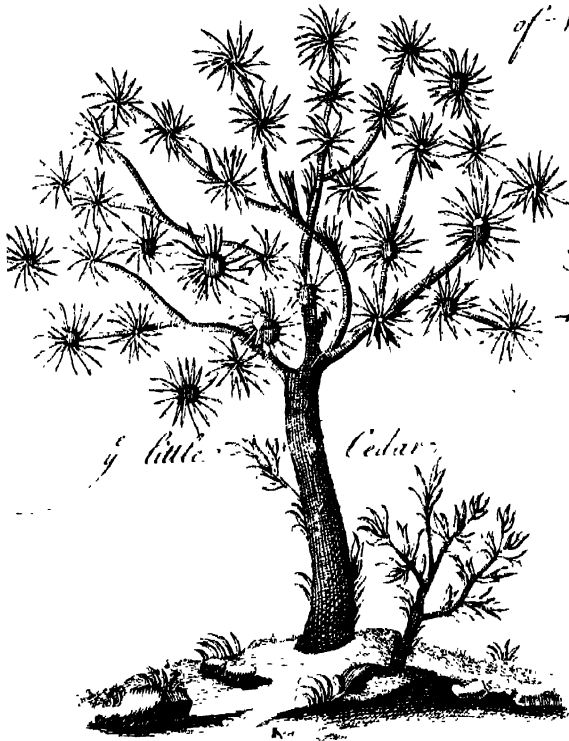
Sassafras is a yellow fragrant Wood, **Lemery.** of a Taste something acrid and aromatick, almost like that of Fennel. It is brought to us in large Pieces from *Florida*, *New Spain*, &c. where it grows, and where the *Indians* call it the *Palm-Tree*; and the *French* give it the Name of *Sassafras*, by which it is call'd by the *Spaniards* to this Day. The Fruit of this Tree is longish, wrinkled, and hangs by a long Footstalk; the Roots are extended along the Ground, bigger or less, according to the Size of the Tree, which is call'd *Sassafras*, by a Cor-

ruption from *Saxifrage*, which signifies that it has the same Virtues with *Saxifrage*, that is to say, it is incisive, penetrating, aperitive, sudorifick, and cardiack; it resists Poison, strengthens the Sight and the Brain, and is good in the Sciatica, Gout, Catarrhs, taken in Decoction or Infusion, by Way of a Tea, &c. It is the Opinion of some, that the *Sassafras*, call'd the *Ague-Tree*, is rather a Root than a Wood, brought out of the *West-Indies*, as *New Spain*, &c. It is of a pleasant Smell, and comes in pretty long Logs, as thick as ordinary Billets. The Bark is red without, and cuts of a Flesh-Colour within; its Taste is a little sharp, but aromatick, abounding with much volatile Salt; from whence it is evident that it has great Virtues; the smallest is to be chosen for Distillation, and must have its Rind about it, for that it possesses more of the ætherial Oil, and volatile Salt and Spirit, than the internal Substance of the Wood: It is a most admirable Sudorifick and Diuretick, never missing of its Effects by those two natural Ways of Evacuation; for if the Sick will not yield to Sweating, it often works off by Urine, being full of Spirit and Salt, and therefore is a great Specifick in all the aforementioned Cases; besides which, a strong Tincture, or the Chymical Oil, is commonly given to facilitate the Labour of Women in Travail, and to expel both Birth and After-birth; after which, it strengthens the Parts, and invigorates the Instruments of Generation. Dose from three Drops to ten or twelve.

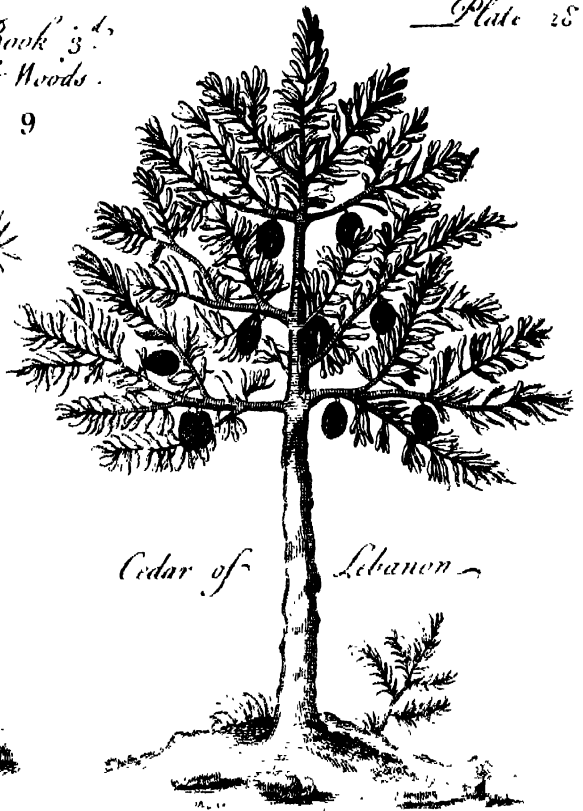
[It is the *Arbor ex Florida ficulneo folio*, C. B. Pin. 431. *Arbor Sassafras Monardi*, Breyner. Prodr. 1. 18. *Sassafras*, Ger. Park. It grows in many Parts of *America*. It is very drying and hot, tho' not quite so much as the *Guaiacum*. It makes an agreeable Tea, and would be in great Use, but that the Scandal of its being good in Venereal Cases prevents many from using it.]

8. Of Guaiacum.

Pomet. THE *Guac*, *Guaiacum*, or *Lignum sanctum*, Holy Wood, grows plentifully both in the *East* and *West-Indies*, and is brought to us in large long Billets or Logs, some of which weigh four or five hundred Weight. This Tree is about the Height of our Walnut-Tree, bearing Leaves long or round, according to the different Species, which distinguishes the Tree to be Male or Female. After the Leaves, come Tufts of blue Flowers, in the Shape of Stars, furnish'd each with a little brown Husk, of the Size of a Hazel-Nut, in which is contain'd a little Fruit of an Orange-Colour.



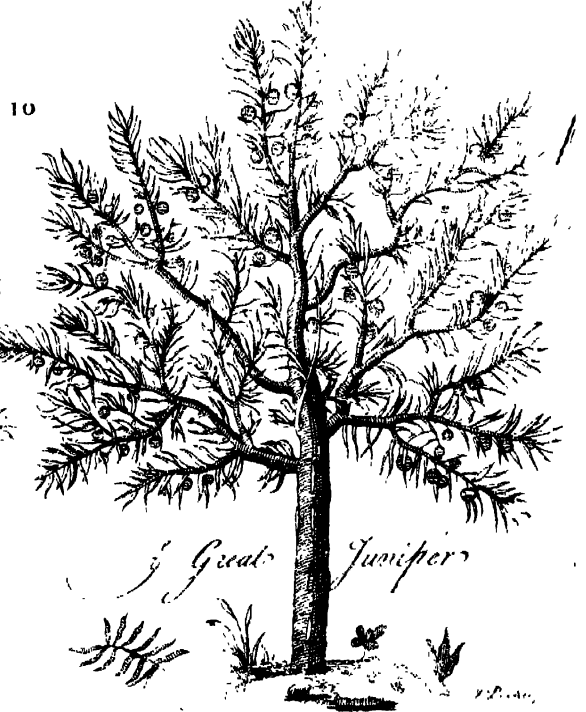
Small Cedar



Cedar of Lebanon



Small Juniper



Great Juniper

It is the best Sort of Wood we have for Turnery-Ware, especially for making Bowls for the Bowling-Green, Mortars, Pestles, Rowling-Pins, &c. The Surgeons, and others, who use it in the Venereal Disease, chuse the Shavings or Rasplings to make their Pustians and sudorifick Drinks. There requires no other Care in the Choice of this Wood, but to see that it be clean, of a blackish brown Colour, resinous, heavy, hard and compact, and of a something acrid Taste, and such as has none of the pale outer Part of the Tree with it. There is made of this Wood, a Flegm, a Spirit, and black Oil, which is thick and foetid; and that which remains in the Bottom of the Retort is black as a Coal; but being made into a *Lixivium*, or a Lye, there is extracted thence a Salt. They make also a Refin and Extract of it, as they do of Jalap.

The Bark of the Tree is likewise of great Use in the Cure of the aforesaid Disease. Chuse the heaviest, hardest to break, grey without and whitish within, of a bitter and disagreeable Taste. We have brought from the *Indies* large Pieces of the Gum, so like to *Colophony*, that it is almost impossible to distinguish it, but by the burning it, whereby it will afford a sweet Scent; and, on the contrary, the *Colophony* will smell of Turpentine. It is one of the greatest Sudorificks we know at present.

Within some Years the Surgeons thought that the Wood of the Box-Tree, to which some have given the Name of *French Guaiacum*, had the same Virtues with the *Indian*, which made them use much less of the true *Guaiacum* than they had been used to do; but if they had been curious enough in the Choice of the right *Guaiacum*, they would have found a vast Difference. The Error arose from hence; they bought it of the Turners, who used to sell them the Sweepings of their Shops, in which it was mix'd with several other Woods, for a Penny or Three-Half-pence a Pound.

The Box-Wood [might indeed have as much Virtue as this.

This Box-Wood is well known in *France*, they make several Sorts of Work of it. The best of it comes from *Spain*, and some Parts of *France*, but chiefly *Champaigne*. A Spirit and black Oil is drawn from this by the Retort, and is rectify'd as that of *Guaiacum*.

Guaiacum, sive Lignum Sanctum, Lemery. is a Tree the Size of a common Walnut-Tree, whose Bark is thick and gummous, and easily parts from the Trunk. Its Wood is hard, firm, weighty, and marbled with brown, red and black; of an acrid Taste: The Leaves are longish, or almost round: The Flowers grow in Clusters, of a pale yellow Co-

lour, hanging upon green Stalks; these are succeeded by a Fruit like small Chestnuts, round, solid, and brown; in which is contain'd another little Fruit, or Seed, of an Orange-Colour. This Tree yields, by Incision, a resinous Gum, of a reddish brown, clean, shining, friable, fragrant, and of an acrid Taste, call'd *Gum Guaiacum*.

The Wood, Bark, and Gum, are all used in Physick; every one of which contains a great deal of essential as well as fixt Salt, Oil and Gum. They are esteem'd good Sudorificks, and are given in the Venereal Disease, Rheumatisms, Catarrhs, Gouts, Scurvy, and Dropsy, and other Diseases, which proceed from Weakness, Obstructions, or Diseases of the *Viscera*. It is a Wood which is white without, and of a greenish yellow, or blueish green sometimes within, the heaviest being the best. It is brought from *Jamaica*, and several Places of the *Spanish West-Indies*, in Pieces so large as to make Bowls of them, which hold from three to twenty Quarts.

[It is the Wood of the *Guaiacum, sive Lignum sanctum*, Park. 1586. *Guaiacum Americanum primum fructu Aceris sive legitimum*, Breyn. Prodr. 1. 31. It is common in *Jamaica*, *St. Domingo*, and many other Places. The Leaves are alated; the Flowers blue and pentapetalous; the Fruit something like the Maple. Some Authors distinguish the *Lignum sanctum* from the *Guaiacum*, and say it is the Wood of the *Guaiacum foliis Lentisci*, Breyn. Prodr. 2. 54. and *Caspar Bauhine* has made three Species of it, 1. the *Guaiacum magna matrice*; 2. the *Guaiacum prope-modum sine matrice*; 3. the *Guaiacum foliis Lentisci*; but Father *Plumier*, who was upon the Spot whence they are all brought to us, affirms they are all the Wood of one Tree in different Circumstances of Age, Place of Growth, &c.

The Wood was formerly famous for the Cure of the Venereal Disease; but it was found not to succeed so well in *Europe*, as in hotter Climates; but it is still kept in use in such Cases as an Assistent, in Diet-Drinks during Mercurial Courses.]

9. Of Cedar of Lebanon.

THE *Cedar of Lebanon* is a Tree which grows to a prodigious Size, *Pomet.* and of a pyramidal Figure, whose Branches are adorn'd with little, narrow, green Leaves, and the Fruit like our Pine-Apples. It is from the Trunk, and the large Branches of this Tree, that there flows, during the great Heats, without any Incision, a Sort of white Resin, very clear and transparent, which we call *Cedar-Gum*, of which the largest Trees yield not less than six Ounces

Ounces a Day. Here are likewise, during the hot Season, little Bladders form'd on the Body of this Tree by the scorching of the Sun ; which being pierc'd, afford a clear white Liquor, like Water, of a strong penetrating Smell ; and when the Tree produces nothing more naturally, they make Incisions in it, and there runs from them an unctuous Liquor, which drops as it runs down the Tree, and makes what we call Refin of the Cedar ; but this, as well as the other Productions of this Tree, are very scarce. This Refin is of a very fine yellow, bright and transparent, and of a very grateful Odour.

Of the Berry-bearing Cedar.

The *Berry-bearing Cedar* is a Tree of which there are three Kinds, differing only in Height, or in the Thickness of the Leaves ; they are commonly crooked, bearing long sharp-pointed Leaves, always green, especially in Winter ; after which come Berries of the Bigness of those of Butcher's Broom, or Knee-Holm, green at first, but red when they are ripe. The Trunk being cut, there issues forth a very clear transparent Gum, which is the true Sandarac ; but as we very seldom have it among us, we use the great Juniper-Gum instead of it, which I shall describe hereafter.

They make of this Wood, by the Assistance of the Retort, a black Oil, which being rectified, is call'd Oil of Cedar, or Cade Oil ; but as these Trees are not very common, we content ourselves with that made of the Great and Lesser Juniper. The true Cade Oil, or Oil of Cedar, is admirable for curing Tetters and Scabs in Horses, Cattle, Sheep, and other Beasts : But as these Sorts of Oil are too dear, we substitute in their Place clear Oil of Pitch, which for that Reason is also call'd Cade Oil, as you will find in the Chapter of Pitch.

Cedrus Magna, sive Libani Conifera, Lemery. or, according to Tournefort, *Larix Orientalis, fructu rotundiore obtuso*, is a Species of the Larch Tree, or a very large, thick, strait Tree, rising Pyramidal, whose Bark is all of a Piece, the Wood very hard and durable, so that it is said never to decay ; the Leaves are small, strait and green, disposed in Clusters along the Branches, putting forth in Spring-time, and falling at the Approach of Winter ; the Flowers and Fruit as before describ'd. There runs a Sort of Gum from the Tree without Incision, hard, and as it were in Grains like Mastick, from whence it frequently is call'd the *Mastick-Cedar* ; the Wood is used in fine Joiners Work, and Turners Ware ; the Tear that flows from the

Tree, is improperly call'd a Gum, because it is the purest resinous Part of the Tree, and is digestive, deterfive, consolidating, strengthening, good against Gangrenes, and proper for Dislocations and Fractures.

There is another Sort of Cedar call'd *Cedrus Baccifera*, the Cedar that bears a Berry, or *Cedrus Minor*, the *Lesser Cedar*, of which there are three Kinds ; the first is call'd the *Phœnician Cedar*, or *Cedrus folio Cupressi major fructu flavescente*, the Great Cypress-leav'd Cedar, with the yellow Fruit ; the Trunk and Branches whereof are crooked and knotty, the Wood reddish, yielding a Smell like the Cypress ; the Leaves narrow and sharp-pointed, harder than those of Juniper and more prickly, green all the Year as the Cypress ; the Shells or Husks are made up of several little Scales, at the Bottom of which grow several Bags or membranous Vesicles, full of Dust ; the Fruit arises upon the same Foot or Stalks with the Husks, but divided into Cells, in which are Berries that turn yellow when ripe, are a little fleshy, odoriferous and of a grateful Taste ; each of them containing three woody Kernels that are hard, hollow on their Backs, and flat on the other Side ; there comes from the Trunk of the said Tree, in the hot Countries, a Gum call'd Varnish.

The second Sort is call'd the *Lycian Cedar*, or *Cedrus folio Cupressi media majoribus baccis*, the Middlemost Cypress-leav'd Cedar, with the great Berries ; this Tree differs from the former, in that it is lower, and the Berries are much bigger.

The third Sort is call'd, *Cedrus Hispanica procerior fructu maximo nigro*, the Tall Spanish Cedar, with the great black Fruit ; it is much higher than the rest, and the Berries a great deal bigger, of a black Colour : These Cedars grow in Italy, Spain, Provence, and Languedoc ; they remain always green, and yield Abundance of Oil ; the Wood is sudorifick, being used in Decoction ; the Berries are proper to strengthen the Stomach, and assist Digestion. The Oil is drawn after the common Method, by a Retort, being black, and passes for the true Oil of Cedar ; it is good for all Sorts of Scabs and Deafness, and may be inwardly given in Hysterick Cases. Dose from two Drops to six.

[The first of these Trees is the *Cedrus Libani*, Ger. 1161. *Cedrus conifera foliis Laricis*, C. B. Pin. 490. It is kept in the Gardens of the Curious ; the Resin is very seldom to be met with, and its Virtues are not now known but by Conjecture ; the Wood is of a red Colour, something resinous, and of a strong agreeable Smell ; it is said never to decay ; it is sometimes used in Physick as a Sudorifick.

The Berry-bearing Cedar is the *Oxycedrus* of the Shops; the original Species is the *Oxycedrus Lycia*, Ger. 1191. *Cedrus major Dioscoridis Clusii*, Pluk. Alm. 201. It is also kept in the Gardens of the Curious. The Wood and Berries both resemble the Juniper in Smell and Taste, as well as Virtues, but they are seldom used.]

10. Of the Great and Small Juniper.

Pomet. THE Great Juniper, call'd in Latin *Juniperus*, is a Tree of different Sizes, according to the different Places where it grows; this Tree is commonly slender, at a good Height of which spring forth several Branches, furnish'd with little, narrow, prickly Leaves, always green; it bears also Berries of the Bigness of a Hazel Nut; which the first Year are green, the second brown, the third black, and which being full ripe, are very alexipharmick.

By cutting the Trunk, and the largest Branches of this Tree, there flows a Gum call'd Sandarac, during the great Heats, which is brought to us from *Africk*, where the Trees grow very high, and in great Quantities. This Sandarac is the *Arabian Sandarac* or Varnish, which is much traded in by the *Swedes*, *Hamburgers* and *English*; this is call'd by some the *Arabian Sandarac*; by others, the *Varnish-Gum*, or *Gum-Juniper*, and is of more Use to Artists than in Physick. Chuse it in large white Drops, and not dusty.

Of the Small Juniper.

The small Kind of *Juniper* is so common every where, that it needs no Description; there is made of the fresh and dried Berries, a white and fragrant Oil; as likewise a Water or Spirit, vulgarly known by the Name of *Geneva*, as a Corruption from the *French Word Genevre*: Besides this, there is a Spirit and Oil drawn from the Wood, by the Retort; which Oil is mention'd in the preceding Chapter. The Wood is usually burnt as well as the Berry, to drive away or expel infectious Air. The *Germans* use the Berry in their *Ragous*, and it serves them for the *Theriaca*, for which Reason an Extract of it is call'd *German-Treacle*. This *Juniper* likewise affords some Sandarac, but in such small Quantities that it is not worth the while to make it.

The Great *Juniper* is call'd *Juniperus Lemeryi*. *rus vulgaris celsior & arborescens*, the common high *Juniper-Tree*, or the *Spanish Juniper*, which is chiefly improv'd in *Africa*. M. *Tournefort* distinguishes this Tree from the Cedar by its Leaves, which are single and flat,

instead of those of the Cedar, which more resemble the Cypress. It is usefick in Decoctions, and fragrant when burnt; to which Purpose it is frequently used in the Houses to prevent pestilential Diseases, and other Infections.

The other *Juniper* is a common Shrub, known to every Body, which is full of Oil and essential Salt; it grows plentifully in some Parts of *England*, and in most Parts of *Europe*; the Berries are cephalick, good for the Nerves and Stomach, to provoke Urine and the Terms, to resist Poison, for inveterate Coughs, Wind-Cholick, and nephritick Pains, together with the Strangury, Gravel, Sharpness of Urine, and all Obstructions of the urinary Passages, Womb, Liver, or Spleen. In *France* they make Comfits of them, which they call *St. Roch's Comfits*, and carry them in their Pockets, that they may chew two or three of them in a Morning, to prevent infectious Airs, and make the Breath sweet.

[The small or common *Juniper* is the *Juniperus vulgaris fructuosa*, C. B. Pin. 488. *Juniperus vulgaris bacis parvis purpureis*, J. B. 1. 293. It is common on Heaths.

The Great *Juniper*, or *Juniperus major* of the Shops, is the *Juniperus maxima Heyrica*, Park. 1029. *Juniperus major bacca cœrulea*, C. B. Pin. 498. this is most common in *Greece*. There is also another Species used in Medicine, which is the *Juniperus Alpina*, J. B. 1. 301. *Juniperus minor montana folio latiore fructu longiori*, C. B. Pin. 489. The principal Use of this Species is, that its Infusion or Juice are given to Horses, to destroy the Worms call'd Bots, with good Success.]

11. Of Brasil Wood.

WE sell to the Dyers several Sorts of red Woods, by the Name of *Brasil-Wood*; the first that is most esteem'd, and most in Use, is the *Brasil-Wood* call'd *Fernambuck*, because it is brought from a Place of that Name in *Brasil*; the next is the *Brasil-Wood* of *Japan*, which the *English* and *Dutch* call *Sapan-Wood*, of which there are two Sorts; to wit, the large *Sapan-Wood*, or the great *Brasil-Wood* of *Sapan*, and the less the *Brasil-Wood* of *Japan*, or the *Biames Sapan*, which is much smaller: The third Sort is the *Lamon Brasil*; the fourth is the *Brasil* of *St. Martha*; the fifth, and much the least, is the little *Brasil-Wood* that comes from the *Antilles*; so that that which makes so many different Kinds of *Brasil-Wood*, is nothing else but the several Places and Difference of the Soil where the Wood grows.

The Tree from whence this Wood is cut, is very thick and large, having long Branches that bear a vast Quantity of little Leaves, roundish, of a fine shining green, among which come Flowers, like the Lilly of the Valley, of a beautiful red, and a sweet Flavour, from whence comes a flat Fruit, in which are enclosed two flat Kernels, of the same Shape and Figure as the Gourd Seed.

The Natives prepare the Wood, which is brought to us, by cutting it close with the Ground, and branching or lopping of it, and taking away the outer Part; so that what remains is only of the Size of a Man's Leg, tho' the Tree was of the Thickness of a Man's Body. Chuse the true *Fernambuck Brasil* in heavy Billets or Logs, compact, and without Pith, sound and firm; that is to say, without the outer Substance and Rottenness; such as, after it is shiver'd in Pieces, shews of a reddish Colour, and being chew'd, is of a sweet Taste; but take care that it be not mix'd with other Kinds of *Brasil*, which is easily known, in that all other Sorts, except the *Japan*, are without Pith; and that of *Lamon* may be distinguish'd from the *Fernambuck*, in that it is in large Billets. Some Persons have assur'd me, that the *Brasil* of *Lamon* comes from *All-Saints-Bay*, where it grows in great Quantities. As to the *Brasil* in Chips, the best Account I can give you of it, is to trust to the Honesty of the Merchant with whom you deal. This Wood is used among the Dyers, and the Stationers make Red-Ink thereof. There is a very red Tincture made of the *Fernambuck Brasil*, of which I have been assur'd a Carmine is made as from Cochineal, but I never try'd it. Likewise there is a Liquid Lake made of this, which the Painters use for Miniature.

This Wood is call'd *Lignum Brasili-Lemery. anum rubrum*; the Tree from whence it comes, by the *Indians* is nam'd *Ibirapitanga*; the Bark is reddish and thorny, the Branches are long, and adorn'd with abundance of small Leaves like the Bramble; the Flowers are little and join'd several of them together, very odoriferous, and of a fine red Colour: This Tree grows in the Woods, and the best Kind is the *Fernambuck*, which is brought us from a Town of *Brasil*, of that Nam'd. Chuse the heaviest, firmest, soundest, reddest, and that which affords the sweetest Smell.

There are several Sorts of this Wood, the principal Use of all which is for the Dyers; it contains a great deal of Oil, and a little essential Salt; is astringent, and the Tincture proper to strengthen the Stomach, abate a feverish Heat, and remove the Inflammation of the Eyes: The Wood boil'd in Water, with a little Allum, will

strike a red Dye into Eggs boil'd with it; and it is used to colour Roots of *Althea* to clean the Teeth withal. Some Authors affirm it to be of great Use against the French-Pox; but I find it seldom or never prescrib'd for that Purpose; for tho' it may be drying, it has nothing of the acrid, hot Quality of the *Guaiacum*, neither does it abound with Resin like that Wood: According to the following Prescription, you will have a Tincture for the dying of Skins, Book-Covers, and the like Things, and to write withal, as Red-Ink: The Tincture prepar'd with Water, only serves for dying of Wooll, which will not turn purple, nor suffer an easy Decay. The Tincture is thus made; take Rasplings of *Brasil*, and, instead of Water, infuse them in Vinegar, or some Lixivium, with a little Gum-Arabick and Allum, setting them in a glazed Pot, or Pipkin, for some Hours, you will have a Blood-red Tincture.

[This is the Wood of the *Erythroxylum Brasili-um Spinosum foliis Acaciae*, Herm. Par. Bat. Pr. 333. *Crista pavonis Coromille folio, tertia, five Tinctoria, maxima, Brasiliana, flore variegato, parvo odoratissimo, siliqua aculeata, Lignum Brasili-um dictum ferens*, Breyn. Pr. 2. 37. It grows all over *Brasil*, and flowers in December; the Heart of the Wood is what ought to be used. It is said to have the same Virtue with the Red Sanders, but is little used in Medicine.]

12. Of Log-Wood, or Campeachy-Wood.

THE *Log-Wood*, call'd *Indian-Wood*, *Campeachy*, or *Jamaica-Wood*, is *Pomet.* the Heart of the Trunk of a large Tree, which grows plentifully in the two Islands aforesaid, and in *Santa Cruce* in *America*, where there are whole Forests of it.

This Tree is bigger or less, according to the Soil that produces it; it rises with a Trunk, very thick and strait, cover'd with a thin Bark that is plain and smooth, of a Silver-grey, or yellowish Colour; the Leaves are like those of the Bay, and being held in the Mouth, afford a Scent like the Clove, which has made it oftener taken for the Tree that bears the Clove than any other, by Reason of the delicate Flavour, which has given it the Name of the *Indian aromatick Laurel*: Among the Leaves comes a small Fruit, which adheres to the Branch by a little Stalk like the Cubebs, and has at the other End a small Crown; the Fruit is of a dun Colour, the Taste sharp and piquant, notwithstanding it is agreeable enough, tasting like a Clove, which occasions it for the most

Part to be call'd Clove-Berry; the Fruit being broken, there are found within three small Kernels very nearly resembling Musk-Seed.

We may observe than, that the *Indian Laurel*, or *Campeachy-Tree*, affords three Sorts of Commodities that are very good and saleable; the first is the Wood, which ought to be chosen true *Campeachy*, cut by the *Spaniards*, as that is the best Kind, such as is not decay'd, and cut, not saw'd at the Ends, which distinguishes it from that of *Jamaica*, which is commonly saw'd, and is brought by the Way of *England*, and coming from *Campeachy* or *Jamaica*, is carried to *France*; this Wood chiefly employs the Dyers, Bead-makers, and others, who use it to dye blue and black. The second Commodity this Tree affords is the Leaf, which may be used in the Place of the *Malabathrum* wherever it is order'd, as this Leaf has more Virtues than it; the *Americans* make use of them for Fomentations, to cure the Palsy, and other Diseases proceeding from cold Causes. The third is the Fruit, which the *French* use in Imitation of the *English*, as being a very strong aromatick, and proper upon several Occasions: As this has been known but of late Years, the *French* have had but little Commerce therein, besides what their Privateers of *St. Maloes* have taken from *England*: The Grocers distinguish it by the Name of Clove-Berry, because of its Resemblance to that Spice in Smell and Taste, and it is call'd with us All-Spice, as having an Analogy to Cinnamon, Cloves, Mace, and Nutmegs, and is very much us'd in all Sauces. By the *English* it is call'd *Jamaica-Pepper*, by the *Dutch*, *Arvonum*, and by the *French*, the Fruit of the *Indian-Wood*, and vulgarly, though improperly, the Clove-Berry. The Flowers of this Tree are said to be very beautiful.

Lignum Indicum, *Campecium*, *Log-Lemery*. Wood, or *Jamaica-Wood*, call'd also *Brasileto*, comes from *Campeachy* and *Jamaica*, where it is chiefly found growing; but it grows in several other Parts of the *West-Indies* in the *Spanish* Territories, the Isles of *Providence*, and the like; where, besides the Wood, the main Produce is the Pepper, or Fruit of the Tree, call'd *Pimento*. What the *English* use comes in great Plenty from *Jamaica*; it is small, round and blackish, almost like common Pepper, but of a more fragrant Smell, and much more aromatick Taste; when one chews it in the Mouth, it is hot, and the Flavour is as if you had all the other Spices in your Mouth at once, as Cinnamon, Cloves, Mace and Nutmegs, being strong, and of an odoriferous Smell, and without doubt possesses all their several Properties, Qualities and Virtues, tho' possibly not in so large a Measure,

in Respect to its Body; for that it consists of much more earthy Parts than any of them, Cinnamon only excepted; but the Tincture, or Oil of it, being extracted from its terrene or seculent Part, with which it holds but a small Proportion in Respect of the four Spices; they are not much inferior to what may be extracted from those generous Drugs: So that in short we must allow this Spice to be stomachick, cephalick, cardiac, uterine, nephritick and arthritick; it is alexipharmick and diuretick, comforts the Brain and nervous Parts, refreshes and strengthens the whole Animal Œconomy, and restores the natural Functions of Life, where weaken'd or decay'd. It is given in Powder, Decoction or Tincture, against Diseases of the Reins, Liver, Spleen and Womb; and is very profitable in Gout or Stone, eight or ten Drops of the Tincture, made with Spirit of Wine tartariz'd, being taken three or four Times a Day, in any Cordial Water or Wine. The foetid Oil, made by the Retort, is good outwardly applied to Gangrenes, Tooth-Ach, and the like.

[The *Log-Wood* is the Wood of the *Crista Pavonis Coronillæ folio secunda sive Tinctoria Indica, flore luteo racemoso minore, siliqua latissima glabra Lignum rubrum Sappan dictum ferens*, Breyn. Prodr. 2. 37. *Erythroxylum sive Lignum rubrum indicum Spiniosissimum Colutea foliis floribus luteis, siliquis maximis*, Par. Bat. Prodr. 333. It is a Native of both the *Indies*; the Wood is used in dying, and sometimes in Physick, being accounted an Astringent: This Tree does not grow in *Jamaica*, but upon the Coast of the Bay of *Campeachy*.

These Authors are mistaken in thinking the *Pimenta* the Fruit of this Tree; the Tree which bears that Spice is the *Myrtus arborea foliis Laurinis Aromatica*, Cat. Jamaic. P. 161. which is very common over the whole Island of *Jamaica*. For a full Account of this Spice, see the Appendix.

13. Of Fustick-Wood.

THE Wood we commonly call by this Name, is the Roots and *Pomet*. Trunk of a Shrub, which Botanists call *Coggigia* from *Theophrastus*, and *Cotinus* from *Pliny*, which has green Leaves almost round; after which grows a Flower, which at first is made in the Nature of a Cluster, of a dark green Colour, and which at last opens itself into the Shape of a Fan, among the Down of which are black heart-fashion'd Seeds. The Roots and Trunk of this Shrub are what the People of *Provence* and *Italy*, after they have peel'd off the Bark, sell

for *Fustick-Wood*, which, according to its good yellow Colour, is supposed to be the better Commodity ; that of *Provence* excels the *Italian* ; but there is a better Sort comes from *Holland* and *England* than either of the other two. The Use of it is for the Dyers, to make a dead Green, and it is of some small Account among the Workers in Ebony and the Curriers.

This Wood is call'd by M. *Tournefort*, *Cotinus Coriaria*, *Coccigria* by *Theophrastus*, and *Caggigria* by *Pliny*.

It is a Shrub of six or seven Feet high, bearing its Branches round, cover'd with a dark red Bark ; the Leaves are large, veiny, almost round like the Elm, but much less, smooth, and green ; the Flowers grow on the Tops of the Boughs in Clusters, of a dark Colour, inclining to Purple. This Shrub grows on the Mountains in *Italy*, *Hungary*, and *Provence*. The Wood is yellow, and used by the Dyers and Leather-dressers ; the Leaves and Seeds are very astringent and cooling, drying and vulnerary, and may be used in Gargles for Ulcers in the Mouth, Throat, and other Parts, and for the Tooth-Ach. A Salt made of the Ashes of the Wood, makes an excellent Purge with two Drams of Treacle of Mithridate, and ten Grains of the Salt ; this may be given three or four Days successively, as the Disease requires, and is said to have such sufficient Virtue to give Relief in the Gout and Rheumatism, as is not to be found in any other Medicine whatsoever, laxative, purgative, or expulsive. Make the Salt thus ; take what Quantity of the Wood you please, burn it to Ashes, and with Furnitory Water, or any other proper Vehicle, make a *Lixivium*, or Lye ; filtrate this, and then coagulate it into a Salt, according to the usual Form.

In Surgery you may use the Salt thus : If the Wound or Sore you would dress be open, first cleanse by this Salt, then anoint it twice every Day with the Balsam or Gum of this Wood, made as that of *Guaiacum*, 'till the Cure is perfected. If there be great Pain in any Part of the Body, and nothing to be seen, anoint the Place with this Gum. By this Gum may be cur'd the Gout, the Palsy, and the *French* Disease.

[*Fustick-Wood* is the Wood of the *Morus fructu viridi Ligno Sulphureo Tinctoria*, *Sl. Cat. Jam. Tateci iba Pis. 163*. The Tree here described by *Pomet*, and which he thought produced the *Fustick*, is the *Cotinus Matthioli*, *C. B. Pin. 415*. *Coccigria Cotinus coriaria nonnullis dicta*, *Chabr. 37*. It is common in *Italy* ; it flowers in *May* and *June* ; the Fruit is esteem'd drying and astringent, but now never used in Medicine.]

There comes another Sort of yellow Wood from *England* and *Holland*, in thick Billets, which

is known by no other Name than that of the Yellow Wood, which serves the Dyers and the Workers in Ebony. I know nothing further touching this Yellow Wood, than what I have here related ; but that it ought to be chosen of the highest Colour that may be, and the Buyer must take care that he has not *Fustick* sold him for it. There comes also a certain Wood from *Lorraine* of a greyish Colour, tending something to reddish, hard and moderately heavy, furnish'd with a Bark that is thin, and a little resembling the Cherry-Tree, which is what we call *St. Lucy's Wood* ; and which, because of its agreeable Scent, is used by the Workers in Ebony. The Choice of this Wood is from its being firm, and without Knots. This Wood is admirable in its own Nature, in that it is not subject to decay, and the older it is, the better it smells. M. *Tournefort* assured me, that this Wood was the Stem of the Shrub which bears the *Mahaleb*, of which I made mention in the first Book of Seeds.

There is also brought from the *Indies* a certain greenish Wood in thick Billets, of a very good Smell, by the Name of *Calambourg-Wood*, serving for a great many Sorts of Works, by Reason of its sweet Scent, which is proper for several Kinds, as also for inlaying and making of Beads ; the Barbers use it as *Rhodium*, boiling it in the Water with which they shave.

The *Dutch* transport two Sorts of purple or Violet-colour'd Wood in large Billets, which is of no other Use but for inlaying. The Choice of this Wood is to pick such as is the most veiny, or marbled within and without, the least spotted or decay'd that can be met withal, and freest from the outward Substance ; the largest Violet-Wood is call'd *Palixandre-Wood*. There is another Sort the *Dutch* transport, of a reddish Colour, tending to a Purple, which the *Dutch* call *Letter-Hout*, and the *French* *China-Wood*. M. *Furetiere* says, that this Wood only comes from the Continent of *Guinea*, which I do not understand, having never seen any. But this is likewise for inlaying.

Besides these Sorts of Wood mention'd before, there are three Sorts of Ebony, to wit, the black, which the *Dutch* bring from the Island of *St. Maurice*, which the Antients believ'd to be a Species of *Lignum Aloes* ; the second is the red Ebony ; the third is the green Ebony. As to the Tree that produces the black Ebony, some affirm that is the Height and Size of the Oak, and that it is like that Wood both in the outer Substance and the Heart, except that the Colour is blacker, and takes a fine Polish or Smoothness, which makes it valued. It is said the Leaves resemble the Laurel, and that it bears a Fruit like an Acorn,

Acorn, upon a little Stalk. The red Ebony is likewise very solid and heavy, being more veined and of a higher Colour. The green has the same Qualities when freed from the Bark and outer Substance.

The Use of Ebony is for several Kinds of inlaying, and because of the great Use it was of formerly, those who work upon Ebony are call'd at this Time Ebonists, who are in *France* a very considerable Body of Work-Men. There are those who affirm that the outer Substance of the Ebony, infused in Water, has a purgative Quality, which will cure the Venereal Disease.

Besides this, there comes from the *Indies* a greyish Wood in large Billets, of an Aniseed Smell; for which Reason it is call'd by the Ebonists, or Cabinet-makers, who work in it, Anise-Wood, or Anil-Wood. There is another Wood fold with the Seed thereof, nam'd Anise of *China*, *Siberia*, or the *Philippine* Isles, or the *Badean* or the Zinge-Seed, &c. describ'd under the Head of *Nigella Romana*, by the Name of *China Anise*. There are also brought to us two Sorts of the Cashew-Wood, the red and the white; the Tree is said to bear Leaves like the Oak; the Wood is light and spongy.

The *Tacamahac-Wood* is the Wood of a great Tree common in *New Spain*, which produces the Gum *Tacamahac*, to be spoke of in its proper Place.

There are yet several Sorts of Wood, as *Sambacane-Wood*, which is a Kind of white Sanders; *Molucca-Wood*, which the Natives of the Country call *Panava*; and many others which I shall

forbear to mention, we having little Trade or Sale for them. As to the *Molucca-Wood*, some have assur'd me that it was the white Cinnamon, which I have no Faith to believe.

[As these Woods are not used in Medicine, a particular Account of the Trees which produce them I judg'd would be foreign to the Intent of this Work.]

14. Of Snake-Wood.

THE *Snake-Wood* Plant is a Creeper which spreads itself a great Way; the Branches are slender and full of Leaves, like those of *Briony*, and fasten themselves to the Trees that are near them; the Wood is firm, heavy and compact, and cover'd with a thin Rind, reddish or of a marbled brown, without Smell, and of an insipid Taste; it is brought to us in long Pieces, of the Thickness of a Child's Arm; it grows in the Islands of *Ceylon* and *Timor*. Chuse such as is the oldest you can find. It is deterfive, desicative, and good in Intermitting Fevers.

[This is not properly a Wood, it is the Root of the *Nux Vomica minor Moluccana*, *Lignum Colubrinum Officinarum*, Bar. Bat. Prod. 357. *Radix Colubrina Lignum Colubrinum*, Mont. Ex. 7. It is of a very bitter Taste, and is a strong Purgative and Emetick, taken in Infusion from a Scruple to a Dram, and in Substance from ten Grains to a Scruple; but its Operation is observ'd to be much more violent upon the *Europeans* than on the *Indians*, with whom it is a common Medicine for the Worms.]

The End of the Book of WOODS.

BOOK the Fourth.

OF BARKS.

P R E F A C E.

By the Word Bark I mean the first, second, or third Covering, or Rind of the Trunk of a Tree; which we use, either as it is taken naturally from the Vegetable, as the Cortex, or Peruvian Bark, and the Bark of the Mandrake; or cleansed, or freed from the first outward Rind, as Cinnamon, Cassia Lignea, and others of the like Nature. I shall begin this Book with the Tree that bears the Cinnamon, as well because of the great Consumption that is made of that Bark, as for the considerable Virtues with which it is endowed,

Of Cinnamon.

WHAT the Antients, as well as the Moderns, call *Cinnamon*, is the middle Bark of the Branches of a Tree which grows the Height of a Willow; and whose Leaves are so like the *Folium Indum*, that it is difficult to find the Difference at first Sight, which has given ground to some People to assert, that the *Folium Indum* was the Leaf of the Tree that bears the *Cinnamon*; but if the Leaves are so like, that the Eye cannot readily distinguish them, the Palate can do it with Ease, because the Leaves of the *Cinnamon* are of so sweet a Taste and Smell, that they surpass, in some measure, the *Cinnamon*. After the Leaves, arise white Flowers, in Form of little Cups, from whence come Berries, of the Figure of an Olive-Stone; each of which adheres to the Branch, as is represented by the Cut engrav'd from the Original, which M. *Tournesort* has in his Hands, of which he gave me, at the same Time, five or six Leaves, of the Shape and Taste here taken notice of.

As to the Place from whence the *Cinnamon* comes, and the Manner of Barking the Tree, I think it proper to relate what Mr. *Tavernier* has writ of it. The *Cinnamon* comes from the Isle of *Ceylon* in the *East-Indies*; the Tree that bears

it is very like our Willow, and has three Barks, or Rinds; but the first and second, or middlemost Bark, are chosen for Use, and the third they never meddle with. This *Cinnamon* costs the *Dutch* more than can be believ'd, for the King of *Ceylon*, otherwise call'd King of *Candy*, from the Name of the Capital City, is a sworn Enemy to the *Hollanders*; so that every Year they are oblig'd to set a Guard of five or six hundred Men to cover and defend the Labourers, during the Season for barking the *Cinnamon-Trees*, and entertain these Workmen all the rest of the Year, without reckoning the several Garrisons they are forc'd to maintain throughout the whole Island. These great Charges enhance much the Price of *Cinnamon*.

When the Inhabitants of the Island gather their Crop of *Cinnamon*, they free it from the outward Bark, which is brown and rough; then they lay it to dry, and roll it up: By this Means it acquires the Figure we see it in, and becomes of a reddish Colour, being of a sweet Smell, and piquant Taste, aromatick, and very agreeable; therefore chuse such, together with the thinnest Bark, and of the highest or deepest red Colour that you can get, throwing aside such as is thick, or has little Taste or Smell. As to those who buy great Quantities, let them take care that they do not purchase *Cinnamon* that has had the Oil or Essence drawn



Cinnamon

Wild Cinnamon



China

Amge

Custick

Wood



White Cinnamon



Clove Cinnamon

drawn from it, which is very difficult to know, unless you taste it Piece by Piece.

Cinnamon is of such great Use, that we have few Drugs which we use so much, as well because of its Virtues, as from its agreeable Taste and Smell. The *Dutch* bring us another Sort of *Cinnamon*, with a large Bark, and very thick, which is that the *Antients*, from the *Arabians*, call'd *Dracheni*, and we, *Rough Cinnamon*. This *Cinnamon* is the Bark of the Trunk and large Branches of the Tree bearing the *Cinnamon*; but as it is a Merchandize or Commodity of little Value, because there is no Sale for it, being without Taste and Smell, except it be here and there a Piece of it, which has a little thin Membrane within it of so piercing and aromattick a Taste, that it is almost impossible to bear it in the Mouth any Time; but there is so little of this to be found among it, that it is scarce worth speaking of. The Confectioners, after infusing the fine *Cinnamon* in warm Water, cover it with Pearl Sugar, and sell it by the Name of *Milim Cinnamon*. The *French* likewise make little Pastilles of *Cinnamon* and Sugar, which, with the Mucilage of Gum-*Tragacanth*, they make into a Paste. The *Dutch*, and the Natives of *Ceylon*, make a Confection of fresh *Cinnamon* taken from the Tree, which is an excellent Sweetmeat to carry to Sea, but very rare to be met withal in these Parts of the World.

2. Of Oil of Cinnamon.

BY Means of a proper Menstruum, and an Alembick, there is made, from fine *Cinnamon*, a rich, clear, and reddish Oil, of a very strong piquant Taste, which it is almost impossible to bear upon the Tongue; nevertheless its Taste and agreeable Smell is the Reason that most People cover it. As *Cinnamon* is a Bark which has very little Oil in it, we are forc'd to have Recourse to the *Hollanders* for it. It is an Error, however, to think they keep a better Kind of *Cinnamon* for their own Use, and to draw the Oil from, than they sell to us; the *Cinnamon* is the same, and different Manner of managing it is the only Reason they have more Oil from it than we can get: They take what Quantity of *Cinnamon* they please; infuse it twenty-four Hours in cold Water, then taking it out, put fresh in, continuing this so long till the Water becomes ting'd of a beautiful red; they then put it into a large Copper Alembick, and add thereto a proportionable Quantity of Spirit of Wine, which has the Property to separate the Oil from the Water, and make it rise to the Top of the Vessel; so that one Pound of *Cinnamon* shall be able to produce near the Quantity of an Ounce of Oil, which is very different

from what we can do here; for Mr. *Lemery* affirms, that four Pounds of good *Cinnamon* will, with Difficulty, produce six Drams of Oil.

It is rare that the *Hollanders* sell the Oil of *Cinnamon* genuine and natural as it is made, but mix it with Spirit of Wine, well deslegmated, and drawn over upon Salt of Tartar; which has given a Handle to several Chymists and Druggists to do the same; so that those who buy an Ounce of this Oil, have not above half an Ounce for their Money; which is of great Consequence, not only as it is a valuable Commodity, but as it is one of the best Medicines; tho' the Cheat is easy to discover two Ways; the first is, when looking into the Bottle in which it is contain'd, you may observe the Humidity that is within: The second is, by dipping the Point of your Knife in, and putting it into the Candle; if there is any Mixture of the Spirit of Wine, it will take fire presently; but, on the contrary to that, when it is pure, it will do nothing but smoke. And this pure Oil is what we call, with just Reason, Essence, Quintessence, or Oil of *Cinnamon*, which is proper to all its Intentions, and excels all other Preparations of the Bark. This Oil and the Bark itself are the greatest Cordial we have; for which Reason the *Dutch*, the *English*, and the *Germans*, as well as the *French* and *Italians*, use such great Quantities of it.

Besides the Oil, there is made a Sort of *Cinnamon-Water*, in which the Oil plentifully abounds. This is distill'd from White-Wine, Rose, or Balm-Water, or, instead of Wine, *Aqua Vitæ*, or Spirit of Wine and *Cinnamon*; from which, by a Glass Alembick, in a Sand-Heat, or *Bain-marie*, a muddy Liquor is drawn, like Milk, which, after a little Time, clears up again, and looks like Spring-Water: That which makes the Water look thick when it is new, is the Oil, which is rarified in the Water, so that it becomes imperceptible in that Form; but when the Liquor separates, and becomes clear, the Oil precipitates to the Bottom of the Liquor, and remains in Form of a little Ball. This *Cinnamon-Water* is very useful to give Women in Labour, in that it is an excellent Corroborative, strengthens the Stomach, and assists Evacuations. It is also prevalent in resisting the Malignancy of the Air, and pestilential Vapours, and to re-establish the natural Heat of the animal Life. The Dose is from half an Ounce to an Ounce.

Some make Pastilles with *Cinnamon-Water* and Sugar, which formerly were call'd *Oleo-Saccharum*; but those are not so good as what are made with Oil of *Cinnamon*. At *Montpellier* they make a Syrup of *Cinnamon*, from a strong Infusion of it and Sugar, brought to a due Consistence,

sistence, and aromatiz'd with a few Drops of the essential Oil. We sell a Tincture of *Cinnamon*, whose Virtue is encreased by several other Aromatics, as Cloves, Mace, Long Pepper, Galangal, Ginger, Coriander, Musk, and Amber-grease, all grossly powder'd and put into a Bottle, with Brandy or Spirit of Wine, and set in the Sun during the hot Days; and this is what we sell by the Name of red *Hypocras*. There is likewise a white *Hypocras*, made almost the same Way, only it is distill'd to discharge the Colour; they may both of them be mix'd in Wine, sweeten'd according to the Palate of the Drinker. This is a mighty Cordial in use at *Montpellier*, and the Southern Parts of *France*.

3. Of *Cassia lignea*.

THE *Cassia lignea* is also a second Bark of the Trunk and Branches of certain Trees, very like those which produce the Cinnamon. These Trees grow in the Isle of *Ceylon* here and there, intermix'd with those Trees that bear the Cinnamon. It is the same as to *Cassia lignea* as it is in Cinnamon, that is, the finer or purer the Bark is, the higher colour'd, the sweeter tasted, and the more biting and aromack it is, the more it is esteem'd; nevertheless, be the *Cassia lignea* ever so good, there is a great Difference betwixt the one and the other, the *Cassia lignea* leaving a Viscosity in the Mouth, which we do not meet with in the Cinnamon. It is of little or no Use in Physick, only that it enters into the Composition of the great Treacle, and there would be but a small Quantity of it sold, but that it is frequently imposed upon the unskilful Buyer for true Cinnamon, tho' a Pound of that be worth more than four of the *Cassia*, and the *Cassia* has not its Virtues. An Oil is drawn from it as from Cinnamon, and used in the same Cases. There are several Kinds of this Bark; as first, the true or Quill Sort, and 2dly, the *Tramboon*, brought from the *East-Indies*. The true is that which is the best for medicinal Uses, and is of the Quill Sort, being of the Thickness of a Goose-Quill, made up into small Bundles, generally ten or fourteen Inches long, of a bright Cinnamon Colour, and much of the Taste, but not so biting upon the Tongue, when chew'd. The *Tramboon* is of three Sorts; First, the small, like small Cinnamon, and something of the same Taste, but not so strong, being more earthy and woody, and of a worse Colour. 2dly, The Bundle Sort, bound up in Bundles like Clove-Bark, of a very hot biting Taste, but breaking more blackish within, and, as it were, gummy. 3dly, The thick Sort, almost like the last, in Rolls as thick

as a Man's Thigh, which is also strong, but of a very dark Colour. *Cassia lignea* differs from Cinnamon, in that it is weaker, darker colour'd, and, when chew'd in the Mouth, more glutinous, dry, and harsh; whence it appears that the *Cassia lignea* Tree, and that of the Cinnamon, are two different Trees. The Difference of the Colours in the *Tramboon Cassia* may be supposed to arise from its Preparation when taken off the Tree, being dry'd in the Sun; when it is less dry'd than it should be, it is of a paler Colour; and, when too much burnt with the Sun, it grows, as it were, black.

Cinnamomum, seu Camella, in English *Cinnamon*, is a thin Bark, that is smooth, and roll'd in long Pipes, of a russet Colour, or yellowish, inclining to red; of a sweet Smell and Taste, piquant, fragrant, and very aromack: It is taken from the Branches of a Tree about the Height of our Willow, which bears a Leaf shaped like the *Indian* Leaf we call *Malabathrum*, which smells and tastes like the Cinnamon. The Flowers grow in little Cups, white and odoriferous, succeeded by a Fruit that is of the Shape and Size of a small Olive, green at first, but growing black as it ripens. This Tree grows in the Isle of *Ceylon*, which is in the meridional Part of *India*; and the Wood is without Smell or Taste. The principal Virtue lies in the Bark, which, when fresh, is greyish without, and yellowish within: When it is separated from the Tree, it easily divides into two Barks, and they keep the inner Bark as the most valuable, which they dry in the Sun, and roll it up just as we have it come to us. This has little or no Smell or Taste when taken from the Tree, but acquires both afterwards; take Care of such as has been dry'd in too scorching a Sun, for that will be blackish, a great deal of the volatile and essential Parts being evaporated: On the other Hand, if it has been dry'd in too moist a Season, it will have a grey Colour, and not have half its Virtue, because the volatile Salts are not sufficiently exalted: But chuse such as is the finest thin Bark, of the highest Colour, a gratefull Smell, and biting Taste. When they have bark'd the Cinnamon-Tree, if they let it alone for three Years together, it will produce another Bark as good as the former. This Cinnamon yields a great deal of exalted essential Oil and volatile Salt; therefore it is proper for the Head, Brain, and Nerves, to fortify the Vitals, comfort the Heart, assist the Stomach, expel Wind, help Digestion, strengthen the Womb, open Obstructions, and provoke the Terms: It is the greatest Restorative in Nature, and an excellent Antidote against Poison, Plague, and any malignant Diseases.

The

The best Preparation of it is the essential Oil, of which, if genuine, two Drops given upon a Lump of fine Sugar, or in a spirituous Vehicle, will revive the Spirits to a Miracle. It is good in Powder, Decoctions, Tinctures, Cordial Waters, &c. from half a Dram to a Dram in Powder, and from that to an Ounce or two in Decoction, Tincture, or Water.

That Cinnamon which is ill colour'd, and of no Taste, is worth nothing; therefore in buying it, you ought to bite, chew, and taste every particular Stick, that you be not deceived; for that without Taste, has either been ill got and dry'd, or distill'd in the Indies, or elsewhere, and its strong aromatick Oil taken from it, which is a great Cheat and Abuse to European Buyers. This Cinnamon was the *Cassia lignea* of the Antients, and the same which in some Shops is call'd *Canella*: The best comes from *Ceylon* aforesaid, and the worst from *Java*. Its Colour it attracts from the Sun-Beams; for the Bark being taken off from the Tree, and exposed to be dry'd in the Sun, that which is not well dry'd is of an Ash Colour, but if too much burnt with the Sun, it is of a blackish, or of a dark brown: If it be well cur'd, it is of a more rosy or pale red, and, by lying together, and Length of Time, changes into the Colour we have it of here.

[There is a great Variety in Opinions among Authors, about the *Cassia*, *Cinnamon*, and *Malabathrum*; some confound *Cinnamon* and *Cassia* together, and say they only differ in Name, others say the Tree that produces them is the same, but that its growing in different Places makes the Difference, and others that they are taken from different Parts of the same Tree; but the certain Truth is, that they are the Barks of different Trees, so much alike however, that they are not easily known from each other. The Tree which produces the *Cinnamon*, is the *Arbor canellifera Zeylanica, cortice acerrimo seu præstantissimo qui Cinnamomum Officinatum*. Breyn. Prodr. 2. 17. *Laurus Ceylanica glandifera, folio trinervio optimum et legitimum Cinnamomum ferens*. Mus. Zeyl. 12.

That which produces the true *Cassia lignea*, is the *Arbor Canellifera Malabarica cortice ignobiliore, cujus folium Malabathrum Officinatum*. Breyn. Prodr. 2. 18. *Cassia vulgaris Calibacha dicta*. Pif. The Bark of this is brought to us from *Malabar* and *Java*. But there is another *Cassia lignea* more common in the Shops, tho' not nearly so good, of a darker Colour, more mucilaginous in the Mouth, and generally in larger Pieces, which is the Bark of the *Arbor Canellifera Indica cortice acerrimo viscido seu muc-*

laginoso qui Cassia lignea Officinatum. Breyn. Prodr. 2. 17. This is brought from the *East-Indies*, and is what we commonly see under the Name of *Cassia lignea*.

The *Folium Malabathrum* is the Leaf of the *Canella Sykvestris Malabarica*. Com. fl. Mal. 68. Katou Karva, Hort. Mal. 5. 105. *Pseudo Cassia Dioscoridis*. Jonsl. Dendr. 162.

Dioscoridis err'd in saying, this was a Sort of *Lens Palustris*, for there is no Room to doubt its being the Leaf of this Tree, but the true and genuine Leaves are very seldom seen, those of the *Cinnamon* and *Cassia* Trees being generally sent over for them.

The Fruit of the Cinnamon-tree by Coction and Expression, yields an oily Substance, of which Candles are made for People of the first Rank; and from the Neck of the Root they draw a fine Kind of Camphir, very rarely to be met with in *Europe*, and of a spicy Smell.]

4. Of White Cinnamon, or Cortex Winteranus.

White Cinnamon, to which some give the Name of *White Costus*, *Costus corticosus*, *Winter's Bark*, or *Winter's Cinnamon*, because *William Winter* was the first who brought it into *England*; is the Bark of the Trunk and Branches of a Tree, of the Size of a Pear-Tree: The Branches are slender, high, straight, and well adorn'd with Leaves like those of the Spurge Laurel, but more delicate, softer, of a Sea-Green, and very fine Smell; after which grows a round Fruit, of a beautiful red. This Tree grows plentifully, at *St. Domingo* in *Guadaloupe*, all about the sandy, mountainous, or rocky Parts; and is met withal in the Isle of *St. Laurence* or *Madagascar*, where it is call'd *Fimpi*.

The white *Costus* we call white Cinnamon, has so great Conformity with the rough Cinnamon, that but for Colour and Taste, few People could discover the Difference. This is the Bark that some Apothecaries improperly make Use of, instead of *Arabian* or *Indian Costus*, of which we made Mention already, and upon that Occasion, give it the Name of *Indian Costus*; which is very improper, because the *Indian Costus* is a Root almost unknown to us, and this is a Bark we are very well acquainted with. Tho' this is of a warm biting Taste, and very aromatick, it is very little in Use, either in Medicine, or to other Purposes, among any of the *European* Nations. It ought to be chosen in fine Pieces, whitish without and within, cleansed from its outer Rind, which is greyish, thick and rough, of a biting, acrid Taste, and a Nutmeg Smell. Some have thought

thought this Bark very useful in the Cure of the Scurvy. It is an Ingredient in some Galenical Compositions, and its Æthereal Oil is excellent for the Gout, and other such Diseases. During the hot Season, there flows from the Trunks of these Trees, a black Gum, fat, and very odorous: This is that which some Druggists call *Gum Alouchi*, and oftentimes sell for *Gum Ivy*, or *Bdellium*; which is easy enough to distinguish, in that *Gum Ivy* is very dry, clear, and transparent, and the *Bdellium* is almost like *Gum-Arabick*, but that it won't dissolve in Water; whereas this *Gum* is soft and greasy, of different Colours, very dirty and impure.

Cinnamomum Winteranum, rolls up in Pipes like Cinnamon, but is much larger and thicker, and of a whitish yellow Colour, very hot, biting, and aromack in Taste, having the Virtues and Relish of most other Spices; and is brought to us out of the *West-Indies*, from *Nevis*, *Antigua*, *Montserrat*, and other of the adjacent Islands. It is an excellent Cephalick, Stomachick, Cordial, and Hysterick: It attenuates and opens, is sudorifick and alexipharmick, prevails against the Vertigo, Megrim, Head-Ach, Apoplexy, Lethargy, Palsy, and most Diseases of the Head and nervous Parts: It strengthens the Stomach, causes an Appetite and good Digestion, expels Wind, and is singular against the Cholick, and griping of the Guts; opens Obstructions of the Bowels, and provokes the Terms: It is a good Cordial, strengthens the Heart, revives the Spirits and fortifies the whole Body, being excellent against Faintings, swoonings, Sickness at Stomach, Palpitation of the Heart, &c. used as the true Cinnamon, in Powder, Water, Oil, or Spirit; but in large Quantities, to answer the same Intentions.

[The true *Cortex Winteranus* is the Bark of a Species of *Periclymenum*, the *Laurifolia magellanica cortice acri*. C. B. Pin. 461. The *Cortex Winteranus*, *Cortex magellanicus*. Mont. Exot. 8. But this, tho' the right and genuine *Cortex Winteranus*, is seldom seen in the Shops; what we meet with in its Place, is the *Canella Alba*. Rai. Hist. The Bark of the *Arbor Baccifera laurifolia aromatica fructu viridi calyculato, racemoso*. Phil. Transf. 192. This grows plentifully in *Jamaica*, the Bark has no Use in Medicine but as a *Succedaneum*, for and under the Name of the *Cortex Winteranus*.]

5. Of Clove-Cinnamon.

THIS is what we call improperly, *Clove-Wood*: It is the second Bark of the Trunk and Branches of a Tree, whose Leaves come very

near those of the *Bay-Tree*; after which there grows round Fruit, of the Size of Gall-Nuts, Chestnut-colour'd, very light, which being broke, you may find within a Kind of Kernel: The Fruit has the Smell and Taste of the Clove, which gave Occasion to the Antients to call it *Clove* or *Madagascar Nut*, because we meet with great Quantities of those Trees in that Island. The *Clove-Wood*, or rather the Bark, having the Taste and Smell of the Clove, is at present made Use of, especially by the Hawkers and Chandlers, who sell it, after it is beat to Powder, for powder'd Cloves, though the Cloves are four or five Times as dear as this Bark; and so they deceive the ignorant. They also sell it whole, pretending that it is the Bark of the Clove Tree, which is false, for the Clove is found only in the Island of *Ternate*, and this Bark is from *Brasil*, or from *Madagascar*.

As it is a Bark in some Use, I shall observe that it ought to be chosen pick'd clean from the outward Bark which is usually grey and knotty, and of a dun Colour; that it ought to be thin, of a biting aromack Taste, and as nearly approaching the Clove, both in Smell and Taste, as possible; but take care that what you buy be not musty, or mix'd with thick Bark, that has neither Taste nor Smell, as happens too often. This is of little or no Use in Physick; but there are some Persons who make a Tincture of it with *Aqua Vitæ*, or Spirit of Wine, which they sell for Tincture or Essence of Cloves: The Confectioners and Perfumers likewise use it instead of Cloves.

Others say, the *Clove-Bark* is brought to us out of *Turkey*, and is almost in the Shape of Cinnamon, but comes very near the Colour of Cloves, and has the same Taste and Smell; so that the Fragrancy and Odour of each are scarcely discernible one from the other, except by the Strength, Cloves being much stronger than this Bark. We seldom make Use of it in these Parts of the World; but the Natives of the Country where it grows, esteem it as a Cephalick, and good against the Cholick, Wind, Gripings of the Guts, Obstructions of the Courses, &c. taken in Powder from a Dram to two Drams, and in Tincture to an Ounce or two. There is a Water made of it, that the *Hollanders* impose upon us for Clove-Water, tho' at an inconsiderable Price, which is a good Stomachick, and an excellent Vehicle to convey any Cephalick or Anticholick Medicine in.

[This is the *Cassia Caryophyllata* of the Shops: It is the Bark of the *Caryophyllus folio et fructu rotundo*. Breyn. Pr. 2. 26. *Caryophyllus Aronaticus Indiæ Occidentalis foliis et fructu rotundo, diphyrenis*,

diphyrenis, seminisibus fere orbiculatis planis. Pluk. Alm. 88. The Tree is plentiful in *Cuba*, and elsewhere in the *West-Indies*.

The Fruit of this Tree is frequently, but erroneously sold in the Shops for the *Carpobalsamum*, and sometimes for the *Amomum*.]

6. Of the Peruvian Bark.

THE *Kinquina*, or *Quina-quina*, *Peruvian-Bark*, or the Bark against Fevers, is the external or outward Bark of the Trunk and Branches of a Tree, that grows plentifully in *Peru*, from whence this is brought us, by the Way of *Cadiz*. But as I have never been in *Peru*, to know how to speak exactly of the Trees which produce this Bark, I shall have Recourse to Mr. *Bernard*, who is a very honest Man, and very curious in the Knowledge of Simples, who had a Description of the *Kinquina* given him from one who liv'd twenty Years in *Portugal*, and had made several Voyages to the *West-Indies*, and to *Peru*.

A true Description of the Peruvian Bark.

The *Kinquina* is the Bark of a Tree that grows in *Peru*, in the Province of *Quitto*, upon the Mountains near the City of *Loxa*. This Tree is almost the Size of a Cherry-Tree; the Leaves are round and indented: It bears a long reddish Flower, from whence arises a Kind of Husk, in which is found a Kernel like an Almond, flat and white, cloath'd with a thin Rind; that Bark which comes from the Trees at the Bottom of the Mountains, is thicker, because it receives in more Nourishment from the Earth: It is smooth, of a whitish yellow without, and of a pale brown within. That which comes from Trees on the Top of the Mountains, is much thinner; it is uneven, browner without, and of a higher Colour within; but the Trees which grow on the Middle of the Mountains, have a Bark yet browner than the other, and more rugged. All these Barks are bitter, but that from the Trees at the Bottom of the Mountains, less than the others.

It follows from hence, that the Bark of the least Virtue, is that which grows in the lowest Places, because it abounds more with earthy and watry Parts, than that which grows high, which for the contrary Reason, is better; but the best of all, is that which grows in the Middle of the Mountains, because it has not too much or too little Nourishment. There is another Kind of *Quinquina*, which comes from the Mountains of *Potosi*, and is browner, more aromack, and bit-

terer than the former, but abundantly scarcer than any of the rest.

Beside the Qualities remark'd in this Bark, it ought to be heavy, of a firm Substance, sound and dry. Beware of such as is rotten, or hurt by Wet, and such as flies into Dust in breaking, or is dirty and unclean, as it happens to be sometimes: But make choice of such as is in little thin Pieces, dark and blackish without, with a little white Moss, or some small Fern-Leaves sticking to it, reddish within, of a bitter and disagreeable Taste; and refuse that which is full of Threads when broke, and of a Russet Colour; and take care that there be not several Pieces of Wood mix'd with it, which you have sometimes sticking to the Bark. This was brought first into *France*, in the Year 1650, by the Cardinal *Lago* a Jesuite, who having brought it from *Peru*, it was had in such Vogue in *France*, as to be sold Weight for Weight for Gold, but the Quantities of it soon afterwards brought over, quickly lessen'd the Price.

The Use of this Bark is for the Cure of Fevers, especially intermitting, for which Purpose it is given in Substance, Tincture, or Infusion; but as it is a Medicine some People have an utter Aversion to, and as the Use of it is of ill Effect, unless properly applied; I would advise no Body to make Use of it without the Direction of an able Physician. The extraordinary Virtues which the *Spaniards* attribute to this *Kinquina*, for the Cure of Fevers, is the Reason why they give the Tree that bears this Bark, the Name of *Palo de Calenturis*, which signifies the *Fever-Wood*.

Kinakina, *Quinquin*, *Cortex Peruviana*. The Peruvian, or Fever-Bark, *Lemery*. is call'd so from the Tree that produces it in *Peru*, where it grows, about the Size of our Cherry-Trees; the Leaves are round and indented; the Flower is long, of a reddish Colour, and is succeeded by a Pod, which contains a flat Kind of Kernel that is white, and enclosed in a very thin Skin. There are two Sorts of it, one cultivated, and the other wild; the cultivated is to be prefer'd much before the other: It contains a great deal of fix'd Salt, and abounds with an Oil; it cures intermitting Fevers best used in the Powder, finely sear'd; from a Scruple to two Drams the Dose: There may be likewise an Infusion made of it in Wine or Water for the same Intention. Some say that Bark is best which is of the most lively Colour, and enclining to a dark Cinnamon, most curled up, as coming from the smaller Branches of the Tree, that breaks of a shining Colour, is of a bitter Taste, very astringent; or rough and styptick upon the Tongue, and whitish outwardly: The thick, flat,

dark-colour'd, is nothing so good; and if it wants its bitter Taste and Stypticity, it is good for nothing.

It is a Specifick for the curing of all Sorts of intermitting Fevers or Agues; and so certain it is in effecting this Cure, that it seldom fails in a skilful Man's Hand: Besides which, Experience tells us, it stops Catarrhs, and all Sorts of Fluxes; but the great Skill of a Physician is to know to whom, when, how to use it, and how long: First, considering the Nature and Quality of this Medicine, it is evident, it ought not to be given to such as have their Courses stopp'd; or to such with whom they seldom flow kindly, but come down pale and sparingly; nor yet to such as are costive in their Bodies, or are commonly troubled with a Constipation of the Bowels; for to such, the Use of this is generally of ill Consequence; nor ought it to be given in continual burning Fevers, because it fixes the morbidick Matter, stops the Pores, and so encreases the Heat, and concentrates it, that it infallibly destroys the Patient. Secondly, when it ought to be given, the Persons to whom we allow it to be given, ought to be prepar'd for the Use of it, by some proper Vomits or Purgatives, such as the *Ipecacuana*, the emetick Wine or Tartar; and purge with *Glauber's Sal Mirabile*, or *Solektivum*, Cream of Tartar, and the like, two or three Times at least, before the Use of the *Cortex*.

Thirdly, You ought to know how it should be given, which is in Powder, from a Scruple, or half a Dram, to a Dram or two; beat it very small and searce it; and about an Hour after the Fit is gone off, put your Quantity of Powder in a Glass of good strong White-White or Claret, and drink it off: There are several other Liquors this may be taken in, according to the Fancy of the Patient. In Infusion, take fine Powder of the Bark one Ounce, Claret ten Ounces; infuse four or five Days, shaking it twice a Day, then decant it clear; it is given in double the Quantity in Infusion, to that of the Powder, because you take the last in Substance; you may make a Tincture with Brandy, or Spirit of Wine, whereof take half an Ounce.

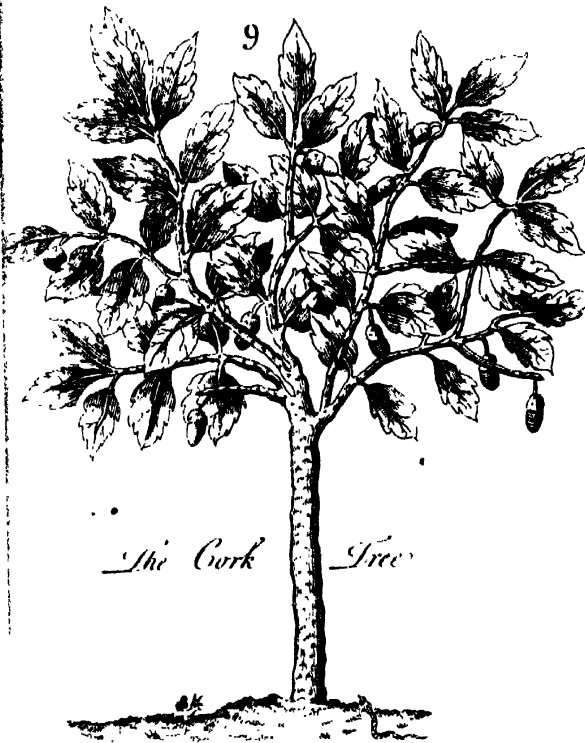
In the fourth Place you ought to consider how long, or often the Bark ought to be taken: Herein you must have regard to the Nature of the Fits, their Strength and Accidents that attend them, as Season, Temperature, Use, &c. In Children, and tender Constitutions, the Dose is to be less, but oftner and longer continued: In Tertian Agues, it ought to be used at the End of the Fit, and taken at different Intervals, till the next Return. When that is over the Remedy must be repeated in the same Manner, 'till the

Expectation of another Fit; what Intervals of Time are to be observ'd between each Dose, depends on the Quantity of the Powder, or Strength of the Infusion, or Length of the Intermission between each Fit: The stronger the Infusion, the longer Space of Time is to be between each Dose; and if the Intermission of the Fits is long, there is no Need of repeating the Doses so often, as if the Intermission was shorter. The whole Quantity, from the first to the last, ought to be about an Ounce and half, or two Ounces; let it be given an Hour or two before Meat, and two or three Hours after; and if it be in Infusion, let the Quantity taken be about four Ounces.

To prevent the Return of the Ague, this Method ought to be continued for eight Days, three Times a-Day: First, early in the Morning, then an Hour before Dinner; and at Night, an Hour before Supper; but if the Ague should return again, as it does, if you purge after it, the Use of the Bark must be repeated after the same Manner as before, and it will not fail to produce the desir'd Effect, which is absolutely to cure the Ague, so that it shall not return any more. But tho' the Ague seems to be perfectly gone, for several Revolutions of Fits, yet it is necessary to continue the Use of the Remedy, for twelve Days, by which Means you will secure the Patient against any fresh Assault.

It is at the End of the Fit that the Dose is to be given, and it must be continued 'till the Cure is perfected; which in a single and double Tertian, commonly happens at the second Fit, or at most at the Third: The same is to be understood in a single and double Quartan, wherein you have two whole Days to give the Medicine in, without Interruption; in which, as in the Tertian, the Ague is master'd at the third and fourth Fit, if not at the very first, which often happens; and to prevent its Return, the Use of the Bark is to be the longer continued after the Cure; for 'tis the too hasty Discontinuance of it, which causes the Relapse, and puts the Patient to a new Trouble of running over the same Course again.

This Medicine ought not to be given at the coming on of the Fit; nor yet during the Time of it; because then, instead of alleviating the Force and Violence of the Ague, it would be apt, by Reason of the febrilick Ferment, to excite a fiercer Conflict, and make the Paroxysm the more violent. This Method being observ'd, the Medicine will intercept the Course of the Disease in its Progress; and being convey'd into the Mass of Blood, by a gentle Motion, it purifies it, and destroys the feverish Ferment, which would produce a new Fit. It ought likewise to be



be given at several Times, to produce, gradually, the wish'd-for Effect; and but a small Space of Time ought to be allow'd between each Dose, that the second Dose may begin its Operation, when the Force of the first is over; and the third may begin to act, when the Strength of the second is lost. It is given, in like Manner, two or three Hours after, that thereby its Virtue may the better unite itself with the Chyle in the Stomach, in order to its Entrance into the Mass of Blood, to correct, separate, and renew it. If this Course is pursued, the Case will be certain and infallible, and it will hardly be possible for the Fit to return again. When the Paroxysm is gentle, in a good Habit, and a good Season of the Year, there is no need of giving it above five or six Days together, once or twice a Day in the Intermission; but when the Paroxysms are strong, oftner, as before directed.

[This is the Bark of the *Arbor febrifuga Peruviana Incolis Gammanaperide*, Jons. Dendr. 476. *Arbor febrifuga Peruviana China China et Quinquina et Gammanaperide dista*, R. Hist. 2. 1976. When this Tree has been stripp'd of its Bark, in a few Months it produces a new one, like the Cork Tree; what we have is of three Sorts or Degrees of Goodness; the first of a bitter and resinous Taste, not so red as the common Sort; the second something less, and cover'd with a Moss, the third, the finest, and in the smallest Quills. The Use of this Bark, the Spaniards say, was discover'd by Accident, an *Indian*, in a Fever, accidentally drinking the Water of a Pond, into which several of these Trees were fallen, was cur'd by it; which made his Friends and Acquaintance search into the Occasion, and so discover this inestimable Medicine.

Notwithstanding all the good Qualities of this Bark, there requires the Skill of an experienced Practiser to use it; for, in ignorant Hands, it is capable of doing as much harm, as good in skillful.]

7. Of the Bark of both the Mandrakes, Male and Female.

THIS is the Bark of the Root of a Plant that is distinguish'd into two Kinds, Male and Female. I shall not trouble myself with the useless Accounts that the Antients have given of this Root, but inform you that both Sorts are very scarce about Paris; so that the Apothecaries are oblig'd to leave out the Leaf of this, as well as that of Navel-wort, in the Composition of the Ointment of Poplar; which is a great Abuse, it being impossible that

the Composition can have the Virtues the Author of it design'd, or that are now ascrib'd to it, when the principal Ingredients are left out. Besides, the Apothecaries, instead of making this Ointment fresh every Year, keep it two or three, which is contrary to the Opinion of those Authors who treat of this, and say, that the cooling Quality of the Ointment *Populea* holds not above a Year. Those Apothecaries, about Paris, who will have this Composition true, are forced to send for it from *Amsterville*; by which means they discharge their Conscience, and serve the Publick faithfully.

The *Mandrake*, as it grows, bears large green Leaves, trailing or hanging upon the Ground, and the Fruit is very like that of the *Coloquintida*; We sell nothing but the Bark of the Root, freed from its woody Part. 'Tis of an Ash-Colour within, and a little more reddish without, of some small Use in Physick, as it is put into some of the Galenical Compositions. With the Bark we have sometimes some of the Root brought us cut into Pieces like Jalap, but it is of little Use, the Heart of it having no more Virtue than a Chip.

The *Mandrake* is a Plant without a Stem, of which there are two Kinds: *Lemery*. First, the *Mandragoras Atlas fructu rotundo* of *Tournefort*. The Leaves rise directly from the Root, above a Foot long, broader than a Man's Hand in the Middle, and narrow at both Ends, smooth, of a brownish green Colour, and a disagreeable Smell. Among these rise short Stalks, each of which bear a Flower made like a Bell, divided commonly into five Parts, a little hairy, of a white Colour, inclining to Purple. When the Flower is gone, it is succeeded by a little round Apple as big as a Medlar, fleshy, and of a yellow green Colour: It contains some white Seeds, which bear the Figure of a small Kidney. The Root is long, thick, whitish, fit, or divided into two considerable Branches, set about with short Filaments, tender almost as Hairs; representing, when it is whole, the lower Parts of a Man; from whence it is call'd *Antropomorphus*, which signifies the Figure of a Man.

The second Sort is call'd the Female *Mandrake*, *Mandragora Pæmina*, or *Mandragora flore subcaules purpurascens*, according to *Tournefort*, the *Mandrake* with a bluish purple Flower. It differs from the former, in that the Leaves are smaller, narrower, more folded, blacker, trailing on the Ground, of a strong stinking Smell; and that the Flowers are bluish, inclining to Purple, the Fruit less and paler, not form'd like a Pear, as some Authors will have it, but round, scented, full of Juice, and containing very small black Seeds. The Root is about a Foot long, divided into two

Branches, brown without, white within, and furnished with some Fibres, but nothing like the former. Both Sorts grow in the hot Countries, in the Plains, or mountainous Places; but the last much rarer. They contain in them a great deal of Oil and Flegm, but little Salt. They are narcotick, cooling, stupifying, &c. applied outwardly, and likewise relieve Inflammations of the Eyes, Erysipela's, scrophulous Tumours, and the like. The Apples are cold and moist, but not so cold as the Root. Being smell'd to, they cause Sleep; so also their Juice taken inwardly, in little Quantities, in a good generous Wine. The Antidotes against their Poison are Wormwood, Rue, Scordium, Mustard, Origanum, Castor, &c. with Wine and Vinegar. The Antients, by *Mandrake*, intended another Plant, quite different from this.

[The Male is the *Mandragora mas*, Dod. *Mandragora fructu majore*, C. B. Pin. 169. The Female, the *Mandragora fructu Pyri*, C. B. Pin. 169: *Mandragoras fœmina* Trag. They are kept in the Gardens of the Curious, and flower in April. Our People who deal in medicinal Herbs, sell the Leaves of the common black Henbane for the *Unguentum Populneum*, instead of those of this Plant. It was formerly esteem'd to have a strong narcotick Quality, and order'd to be given before an Amputation, to deaden the Sense of Pain, by stupifying the Patient; but it is now never used in such, or indeed hardly in any other Intentions.]

8. Of the Autour Bark.

THIS Bark very much resembles, in Size and Colour, the large or gross Cinnamon, except that it is more decay'd on the Outside, and of the Colour of a broken Nutmeg within, distinguish'd with many little Sparkles. It is very light and spongy, of an almost insipid Taste, and without Smell. They bring it from the *Levant* to *Marseilles*, from whence it comes to us. This is of no other Use, than as the *Chouan*, to add to the Perfection of Carmine Colour. A Person assur'd me that it grew about *Paris*, and gave me a Piece of a Bark, which is something like it, but of a bitter Taste, and an earthy Colour, without any Sparkles.

[This is never seen in the Shops, nor used in Medicine.]

9. Of the Cork-Tree.

CORK, which the *Latins* call *Suber*, *Pomet.* is the outward Bark of the Trunk of a Tree, which grows plentifully in *Spain*, *Italy*, and *France*, chiefly in *Gascony*, and

upon the *Pyrenees*. The Leaves of these Trees are of a moderate Size, green on the upper side, and whitish underneath, indented all round; it bears Acorns like those of the Oak.

When the Inhabitants of those Parts would gather this Commodity, they take off the Bark of these Trees from the Top to the Bottom, and after put one Piece upon another, to a reasonable Height, in a Pit or Ditch that is full of Water; and having loaded it with Weights to keep it down, they leave it in this Condition for some Time, and when it is swell'd, soak'd, and laid strait, they remove it to another Ditch, and so to a third and fourth; and after that take it out of the Water to dry: Which being done, it is transported in Bales to different Parts of the World.

Chuse your Cork in fine Boards, all of a Piece, not full of Knots or Chinks, of a moderate Thickness, yellowish without and within, and such as is even when it is cut. We commonly call this Cork, white Cork of *France*; because this Sort is prepar'd in *Guienne*, chiefly from *Bayonne*, from whence almost all that is used in *France* comes. We bring from the same Parts another Kind of Cork, which we call *Spanish Cork*, and which, to be fine, ought to be light, plain, blackish without, as if it had been burn'd, yellowish within, and easy to cut, not rotten; but take the thickest Sort you can get, that being much more esteem'd, and dearer than the thin. A Friend of mine assur'd me, that the Blackness of this Cork proceeded from nothing else, but that it was steep'd in Sea-Water instead of fresh Water.

The Use of this is too well known to need any Account of it; I shall only tell you it is of some small Use in Medicine, as to stop Bleeding, being reduced to Powder, or put into some astringent Liquor: Burn'd, and mix'd with the *Unguentum Populneum*, it is very proper for the Piles. The *Spaniards* burn Cork into an extraordinary fine Black, which is what we call *Spanish Black*, and is used for several Sorts of Work.

Suber Latifolium, the broad-leav'd Cork, according to *J. Baubin*, *Gerard Lemery*, and *Parkinson*; or the *Suber Latifolium perpetuo Virens* of *Tournefort*, the broad-leav'd Cork that is always green; is a Tree of a moderate Height, very much resembling the Oak, but the Trunk is thicker, bearing fewer Boughs, and the Bark is a great deal thicker, very light, spongy, of an Ash-colour, tending towards a Yellow, which is taken from the Tree first, and afterwards freed from an inner Bark; the Leaves are like the Holm Oak, but much larger and longer, softer, greener on the Outside, sometimes a little indented; the Cups and the Acorns are also like those of the Oak. This Tree grows in the hot Countries,

tries, as *Spain, Italy*, towards the *Pyrenees*, and in *Gascony*; that which grows in *Spain* is different from those that grow about the *Pyrenees* and in *Gascony*, in that the Bark is black on the outward Surface, and the Leaves continue green all the Winter; whereas they fall from the others at the End of Autumn.

The Acorn of the Cork is astringent, and proper in the Wind Cholick; the Dose is from about a Scruple to a Dram; it contains a great deal of Oil and little Salt; but the Bark has less of the Salt, and more of the Oil; it is detersive and astringent; it stops the Hemorrhoids and Belly-Aches, being beat to Powder: It is proper to heal the Piles, being burn'd and applied outwardly.

[This is the Bark of the *Suber Latifolium perpetuo virans*, C. B. Pin. 424. *Suber Latifolium*, L. B. 1. 103. It is kept in the Gardens of the Curious. The remarkable Property of this Tree is, its bearing, the Loss of its Bark without Damage, and producing, in Time, a new one.]

10. Of the Capers Bark.

THE *Cortex Capparis*, or *Cappers Bark*, is the Bark of the Tree of that Name; it is brought dry from *Italy* and *Provence*. It should be chosen new, and of a piercing bitter Taste. It is warm and diuretick, cleansing and detergent: It

is given in Swellings and Hardness of the Spleen, and is an Ingredient in some Compositions.

[This is the Bark of the Root of the *Capparis rotundiore folio*, Ger. 748. *Capparis Spinosa folio rotundo*, R. Hist. 2. 1629. The *Capers*, so common in Pickle with us, are the Buds of the Flowers of the same Tree.

There are besides a great many Sorts of Barks, in which we have no Trade; as the Bark of the Root and Trunk of the Tree call'd *Macer*, the *Coru*, and *Hivorahé*, and others, which we have but little of, and which nevertheless are reckon'd good Medicines, as may be seen in Authors, who have wrote Histories of *Indian Drugs*, to which the Reader may have Recourse; but as many People make Use of Mace in Bloody-Fluxes, some sell this *Macer* in the room of that, believing it to be the same Thing, though there is a vast Difference, this being the Bark of a Tree, but Mace the covering of the Nutmeg.

[The *Coru Bark* is the *Coru* of *Acosta*, *Gariacas*, &c. The *Hivorahé*, properly *Hyvourabé*, a *Brazilian* Word, signifying a scarce Thing, is the *Hyvourabé* of *Thevet*; and the *Macer* the Bark of the *Ulm affinis vasculis Membranaciis et semine intus incluso composito*, R. Hist. 2. 1799. But as these are never used, or heard of with us, a more particular Account of them would be foreign to the Intent of this Work.]

The End of the Book of BARKS.

BOOK the Fifth.

OF LEAVES.

P R E F A C E.

I Mean by Leaves the Verdure of Trees, Shrubs, and Plants, and shall therefore only comprehend, in this Book, the Leaves which issue from the Branches or Stalks of Trees or Plants, as these Parts of Plants only ought to be called by that Name. Some use the Word Leaf for the component Parts of Flowers, as *Roses, Tulips*, and others; calling them *Rose Leaves*, &c. But as I have not follow'd that Method, I shall here only treat of the green Leaves which grow from the Stalks, and not of those colour'd Leaves which compose the Flowers of *Roses*, &c.

In this Book I shall also treat of such Leaves as are work'd for Use; as the *Tobacco*, and such as we have the *Fæculæ*, or the Salts drawn from; as the *Anil* or *Indigo*, the *Kali* or *Glasswort*, and others.

1. Of Dictamnus of Crete.

THE Dictamnus of Crete, or Camphire, is a Plant of two or three Feet high, whose Leaves are of the same Shape as a Man's Thumb, white and woolly both on the upper and under Sides, after which rise Flowers in Spikes of a Violet Colour. This Plant, which is very beautiful to look upon, grows plentifully in the Isle of Candia, from whence it takes its Name.

Chuse your *Dictamnus* fresh and new, with fine, white, large, thick, soft, woolly Leaves, of a sweet aromatick Taste, and other such as is furnish'd with the deepest blue Flowers you can get; and refuse such as has hard Leaves, not hairy, and where you meet with a Seller of little Sticks than Leaves. This *Dictamnus* is of some Use in Physick because of its warm aromatick Quality, and is an Ingredient in the Venice Treacle, and some other Preparations.

Origanum Onites latifolium tamentum, seu dictamnus Creticus of *Tournefort*, is a Kind of *Origanum*, or a fine white Plant agreeable to the Eye: The Stalks grow about two Feet high, hairy, a little purplish, divided into Branches or Twigs; the Leaves are of the Bigness of the Nail of the Thumb, roundish and pointed, with a small End, cover'd on both Sides with a white Down, odoriferous, and of an acrid pungent Taste; the Flowers grow spike-fashion on the Top of the Branch, of a purple Colour; when the Flower is gone, there follow four Seeds that are almost round, enclosed in a Covering that serves as a Cup to the Flower; the Root is small and numerous. It grows in *Candia*, on *Mount Ida*, from whence it is brought dry. The Leaves are aperitive, cordial, proper to provoke the Terms in Women, to lessen Labour-Pains, to open and remove Obstructions, to resist Poison, and drive away malignant Humours by Transpiration. It is given in Powder for all the same Purposes: Dose to a Dram, and half an Ounce of the Decoction, or Tincture, in White Wine, for Sicknes at the Stomach.

[This is the *Dictamnus Creticus*, C. B. Pin. 222. Park. 27. *Dictamnus Creticus, five verus*, J. B. 3. 253. Its Place of Growth is the Island from whence it has its Name, but it is cultivated every where in the Gardens of the Curious; it flowers in July; it has been look'd on as a vulnerary Cordial, &c. but is little esteem'd at present, and scarce ever used but as an Ingredient in some of our Compositions.]

2. Of Polium Mountain.

THERE are two Sorts of *Polium Mountain*, the White and the *Pomet*. Yellow; the Yellow *Polium Mountain* is a Plant of the Height of half a Foot, having small thick indented Leaves, garnish'd above and below with a fine yellow Down, inclining to a Gold Colour, and the Flowers around of a Gold Colour, very fine to look upon; of an aromatick Smell, and bitter Taste. This little Plant grows plentifully upon the Mountains and high Hills about *Provence* and *Languedoc*; it is brought to us in little Bunches with the White, which grows in the Plains, or by the Way Sides, chiefly in sandy or other dry Places, being notwithstanding, very different from the former, in that the Leaves are much less, and not so woolly, bitterer, and altogether white; they are used in several Compositions, and are counted alexipharmick and cordial. Chuse such as are newly gather'd with their Flowers on, of a bitter and disagreeable Taste.

Polium Montanum, or *Polium Mountain*, is a Plant whereof there are two *Lamery*. Sorts, one yellow, and the other white; the first is call'd *Polium Montanum luteum*, by *Tournefort*; or *Polium Montanum vulgare*, by *Parkinson*: It is of a small Height, very hairy and woolly, bearing a great many slender, round, hard, woody Stalks; the Leaves are small, oblong, thick, and indented; the Flowers, says Mr. *Tournefort*, are divided into five Leaves, as the *Germania* Flower; when that is dropp'd, small round Seeds follow, that are enclos'd in a Covering, which serves as a Cup to the Flower: This Plant grows on mountainous and rocky Places in *Languedoc*, *Provence*, and *Dauphine*.

The second Sort is call'd *Polium Montanum album*, by *Tournefort*, &c. and the *Polium Mountain* of *Montpellier*, by others. It differs from the former, in that the Stalks lie upon the Ground; the Leaves are less, and not so full of Cotton; the Flowers are whiter, and less scented. This Plant grows not only on the Mountains and hilly Places, but likewise in the sandy dry Plains, by the Road Sides, in *Languedoc* and *Provence*. The Yellow is the best and most valued in Physick. This Plant yields a great deal of exalted Oil and volatile Salt; the Tops are chiefly that which they call in *Latin*, *Coma Polii*, or *Polium Hair*.

They are aperitive, cephalick, sudorifick, vulnerary, provoke Urine and the Terms, resist Putrefaction, fortify the Brain, and expel malignant Vapours from the Head and Heart.

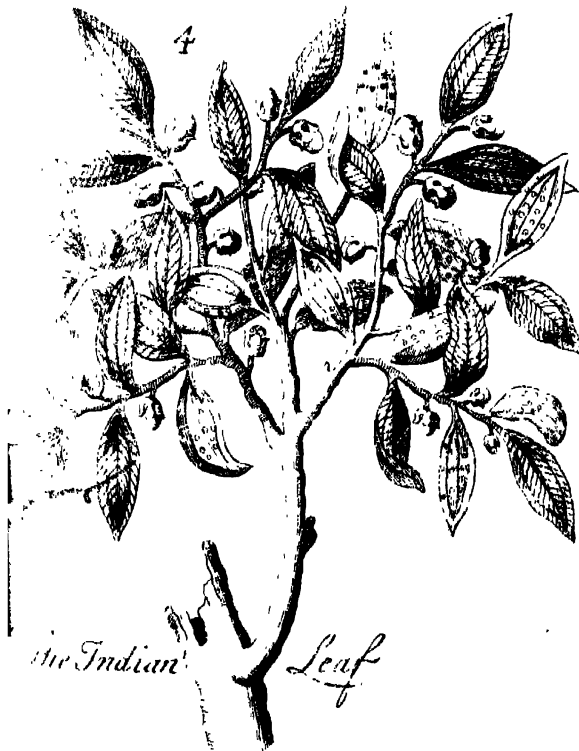
Book. 5.
of Leaves.



Mountain Peleg Hair



Britanny of Crete



the Indian Leaf



Morari

[The White is the *Polium Montanum album* of most Authors; *Polium Montanum Monspeliacum*, Park. 24. this is common in France and Italy: The Yellow is the *Polium Montanum luteum* of most Authors; the *Polium Montanum vulgare*, Park. 24. this grows in Spain and some Parts of France; they are both kept in the Gardens of the Curious here. There are also two other Species of this Plant, call'd Official, which are the *Polium alterum* of the Shops; the *Polium Lavendulae folio*, C. B. Pin. 220. *Polium Lavendulae folio flore albo*, Ger. Em. 655. and the *Polium Montanum Officinarium* of the Catalogues of the Official Plants in Chelfea Garden; this is the *Polium Maritimum erectum Monspeliacum*, C. B. Pin. 221. *Polium Monspellularum*, J. B. 3. 299. These have all the same Virtues, but are very little regarded in the present Practice.]

3. Marum, or Herb Mastick.

THE *Marum* is a little Plant that looks pretty to the Eye; the Leaves are greenish, very small, and Spear-pointed; the Taste very bitter and disagreeable, and therefore it is call'd *Marum quasi Amarum*, as being bitter. After the Leaves come Flowers in Spikes, almost like those of Lavender, which are of a purple Colour, and strong scented.

This Plant grows plentifully in the Isles of Hyeres, near Thoulon, from whence those who have occasion for it must have it brought. Chuse it fresh, odoriferous, furnish'd with Flowers, and as green as possible. It is little used in Physick, only in the Composition of the Treacles of *Hedycroi*, and the like; but Apothecaries frequently substitute *Amaracus*, which is what they call Sweet Marjoram, in its Place.

Marum is a Plant that has two Species; the first is call'd *Chamaedrys Maritima incana frutescens foliis lanceolatis*, according to Tournesort, which is the hoary Sea-germander, with Spear-pointed Leaves. It is a sort of *Germander*, or a little Plant which grows like Thyme, with a great many Branches, or little round Twigs, woody and whitish, cover'd with Leaves larger than those of Garden-Thyme, and liker Wild Thyme; the Flowers like those of *Germander*, of a purple Colour; when the Flower is gone, it bears in its Place four Seeds that are almost round: The whole Plant has an odoriferous Smell, and a piquant biting Taste: It grows in the hot Countries, but is introduced now into most Gardens.

The second Kind is the *Marum vulgare*; which is a Plant whose Stalks, Branches and Leaves,

are like Marjoram, but something higher; for this grows near two or three Feet high, being woody, and extending it Branches; it has some Resemblance to the first Sort of *Marum*, but is larger, whiter, and of a bitter smart Taste; the Flowers and Seeds are like those of Thyme; the Root is woody, and all the Plant of a strong Smell, that is aromatick and agreeable enough; the best is that which grows in Spain, and other hot Countries; it requires a dry stony Ground; both Sorts abound with Plenty of Oil and volatile Salt, with a little Phlegm. The *Marum* is cephalick, stomachick, sudorifick, vulnerary, and uterine, being good against all cold and moist Diseases of those Parts, Cramps, Convulsions, Burstings, Strangury, and the Bittings of mad Dogs, Serpents, and other venomous Beasts, being a famous Alexipharmick. It is likewise useful in all malignant and pestilential Fevers. Dose from a Dram to two Drams. The Herb is of the Nature of *Origanum* and Sweet Marjoram, and has all their Virtues. The distill'd Oil may be given from two Drops to six, against cold Head-aches, Megrims, Vertigos, Apoplexies, Lethargies, Palsies, Weakness of the Nerves, &c.

[The *Marum* of the Shops, is the *Marum vulgare*, Park. 12. *Thymbra Hispanica Majoranae folio*, Tourn. Inst. 197. It is kept in Gardens, and flowers in July. It is accounted a Cephalick, Sudorifick, and Aperitive, but is seldom used.]

4. Of the Indian-Leaf.

THE *Folium Indum*, *Thamalapatra*, *Malabathrum*, or *Indian-Leaf*, *Pomet.* comes from a large Tree that grows in the East-Indies, about Cambaja.

The Antients knew as little of this Leaf as of many other Drugs, some having writ that it was found swimming upon several Lakes in the Indies: But the most rational Opinion is, that this Leaf comes from a Tree of the Size of the Lemon. Among the Leaves grow small Berries, very like those of Cinnamon, except that they are less. Some of these Leaves have on their Under-Side a Kind of little Bladder, of the Bigness of a Pin's-Head, which some People will have to be the Seed.

I cannot understand for what Reason the Antients made use of this Leaf in the Composition of Treacle, since it is almost without Smell or Taste; notwithstanding, I cannot positively affirm that they were to blame in it, because when it is fresh gather'd it may have both; but I never could find that it had any sensible Quality at all; however, as I am not able to prevent the Use of it, or hinder its Sale, I shall direct you to chuse it

it in fair Leaves, large, and the greenest and least broken that may be.

Folium Indum, seu Malabathrum, or Lemery. The *Indian-Leaf*, is the Size of one's Hand, like the Lemon-Leaf, of a pale green, smooth, and shining, having three Nerves that run length-ways upon it. It grows upon a Tree that is found in *Candaja*, from whence it is brought dry'd. Authors advise us to chuse the freshest, having a weak Smell when bruised, like Cloves, and of an aromatick Taste; but none of the Leaves that are brought to us have any thing of these Virtues, but appear perfectly insipid and tasteless. By a chymical Distillation it affords an Oil and a flegmatick Spirit, which contains some little Salt in it. This Leaf is hot and dry, agreeing in Nature and Virtues, as they will have it, with Spikenard, or, as others, with Mace. It is warming, digesting, and strengthening; comforts a cold Stomach; and helps Digestion. The Powder is diuretick, stomachick, alexipharmick, and an Antidote against the Plague. Dose from half a Dram to a Dram. A Tincture of it in Wine or Brandy causes a sweet Breath; bathed on the Eye-lids, it strengthens the Eyes, stops the Rheum, and abates the Inflammation.

[See a more perfect Account of this Leaf at the End of the Chapter of Cinnamon, where it naturally came under Consideration, as the Leaf of one of the Trees of that Species.]

5. Of Tea.

Pomet. THE *Tea*, which the People of *China* and *Japan* call *Cha*, or *Tcha*, is the Leaf of a little Shrub which grows plentifully about *Pekin* and *Nankin* in *China*, and in several Parts of *Japan*. This is reckon'd the best, and from its excellent Qualities, is call'd the Flower of *Cha*, or *Tea*. It is a slender green Leaf, pointed at one End, and roundish at the other, and a little not so indented round about; and in the Middle of each Leaf there runs a Filament, or String, from whence proceed a Number of little Hairs. In a Word, it is of the Shape of the Figure represented in the Plate, which was taken from a Branch which was given me by a Person of Nobility, who brought it from *Holland*. Among the Leaves grow several Husks, which are each of the Size of one's Finger's End, of a very particular Shape, in each of which are found two or three Seeds of the Figure of the *Arca*, of a Mouse-colour'd Grey without, and within having a white Kernel, very subject to be worm-eaten.

This *Japan Tea* differs not from that of *China*, but only as the Leaves are much smaller, and the

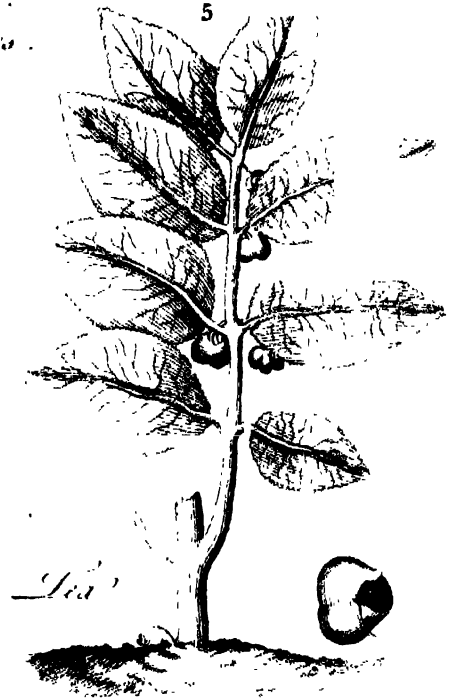
Taste and Smell more agreeable, and it is usually of a finer, clearer green. This Difference of Smell, Taste and Colour, has rais'd the Price; so that the *Japan Tea*, as describ'd before, which is the true Sort, of the fine *Water* Flavour, will sell for two Thirds more than that of *China*.

The *Tea* which the *Dutch*, *English*, and other Nations bring to us is in truth made of twisted Leaves, as it is now sold among us, and is thus prepar'd by the Natives of the Country; who, after they have gather'd it, dry it gently before the Fire, and the Leaves, in drying, curl up just as we now see them. And that the Buyer may not be imposed on in this Commodity, which always bears a considerable Price, let him chuse that which is the greenest, the best scented, and which is as little broke into Dust or small Powder as possible, and prefer that, as I have observ'd, which comes from *Japan*, before that of *China*.

The *Tea* is so much in vogue with the *Eastern* People, that there are very few who do not drink it; and the *French* some Years ago had it in universal Esteem; but since Coffee and Chocolate have been introduc'd into that Country, there is nothing near the Quantity used as was before. I shall say nothing of its Virtues, but refer you to such Authors as have treated particularly of it, especially the *Sieurs de Four* and *de Bligny*.

I cannot pass over this Article, without saying something of the Flower of *Tea*; the Person who gave me the Leaves, made me at the same Time a Present of a Sort of *Tea* entirely different from the common *Tea*, in that it is of a blackish brown Colour, and more of the Shape of a Flower than a Leaf; and, whether this be a Leaf or a Flower, it is so valued by the *Dutch*, that they sell it Weight for Weight for Gold, which is about four Pounds an Ounce; as well by reason of the small Quantity they get of it, as for its agreeable Smell and Taste, particularly when it is new, in which it abundantly excels the true *Japan Tea*.

The chief Reason that this is become such a good Commodity to buy in *Europe*, is because the *Dutch*, &c. have it in Exchange for Sage, which the *Japones* and *Chinese* are great Lovers of, which is not without Reason, since we have not a Plant that is endow'd with more Virtues than Sage, especially that Sort which, for its singular Goodness, is call'd *Sage of Virtue* among us; and is the same with the *French Sage*; and it is certain, that if this grew in *India*, it would be much more valued; but because it is common, we make no Account of it, notwithstanding the *Latin* Proverb, *Cur morietur homo, cui Salvia crescit in horto?* Why should any body die that has Sage



in his Garden? So that we need not wonder if the *Chinese*, &c. exchange *Tea* for it.

It may not be improper in this Place to refute the Error into which the Author of a Treatise of *Tea, Coffee, &c.* has fallen, when he says that this *Tea* produces a blackish Seed, which he saw brought into *France*; but he was wrong inform'd, since the Fruit of the *Tea*, as I have said before, is of the Shape of the *Arca*, and the Size of an Acorn cut in two, and is cover'd with a thin Shell, of a Chestnut Colour. This Author observes, that there is a febrifuge Syrup made of *Tea*, to which he attributes great Virtues, which those who desire to know farther of may consult his Treatise for.

The, or *Tsia*, is a very little Leaf, *Lemery*. which is brought dry'd from *China, Japan*, and *Siam*. It grows upon a small Shrub, from whence it is gather'd in the Spring, at which Time it is little and tender. The Figure or Shape of it is oblong, pointed, thin, a little indented on the Sides, of a green Colour. The Flower is compos'd of five white Leaves, form'd like a Rose; and some *Stamina*; which, when gone, is succeeded by a thick Cod, like a Hazel-Nut, of a Chestnut Colour, in which are found two or three Nuts or Berries, which contain in each a little Kernel, of an ill Taste. The Root is fibrous, and spreads upon the Surface of the Earth. This Shrub flourishes equally in rich or poor Ground. The Leaf is more used for Pleasure in the Liquor we call *Tea*, than for any medicinal Purpose; but it has a great many good Qualities, for it lightens and refreshes the Spirits, suppresses Vapours, prevents and drives away Drowsiness, strengthens the Brain and Heart, hastens Digestion, provokes Urine, cleanses or purifies the Blood, and is proper against the Scourge.

Tea is the Leaf of the *Etyraci* & *Euonymo Medicæ affinis*. The *Sinensium sive Tsia Japonensium*, *flore nivo*, *simplici* & *pleno*, Br. Pr. 2. 98. *Thea frutex folio Cerasi, flore Rosæ sylvestris, fructu unicocco, baccato, & ut plurimum tricocco*, Kamp. Hist. Jap. 2. Ap. 2.

We have six Kinds of *Tea* used in *England*; 1. The *Bohea*, of a dark Colour, giving a brown Tinge to the Water it is infused in; 2. the *Congou*; 3. the *Peco*; 4. the *Green Tea*, call'd *Singlo*, of which there are two Kinds; the one with oblong narrow Leaves, the other with smaller; both equally good, and both of a blueish green Colour, crisp to the Touch, and giving a pale green Colour to Water they are infused in; 5. the *Imperial Tea*, the Leaves of which are large and loose, and less roll'd together than those of the former Kinds; the best is green, crisp in the

Mouth, and has the most agreeable Flavour; the sixth is that call'd the *Hyson Tea*, now most used among Persons of the upper Rank. All these Kinds are the Leaves of the same Tree, only differing according to the Time of gathering and Manner of curing. These are much more used for Pleasure than as Medicines; the *Bohea*, however, is esteem'd softening and nourishing, and good in all inward Decays; the *Green* is diuretick, and carries an agreeable Roughness with it into the Stomach, which gently astringes the Fibres, and gives them such a Tensity as is necessary for a good Digestion: Improper or excessive Use may make this, or any thing else that has any Virtues at all, do Mischief; but there are very few Instances of that; and with Moderation, it certainly is one of the best, pleasantest, and safest Herbs ever introduced into Food or Medicine, and in the frequent Use of which, People generally enjoy a confirm'd Health: The *Green* indeed, if drank too freely, is prejudicial to such as have weak Lungs; such People, therefore, ought to drink the *Bohea* with Milk in it.]

6. Of Senna.

THE *Senna*, which some call the *Eastern Leaf*, comes from a Plant, *Pomet.* or rather a Shrub of about a Foot high, which grows in several Parts of the *Levant*, and also in *Europe*. This Plant, or Shrub, bears Leaves which are more or less green, and of different Shapes, according to the different Places where they grow. Among the Leaves come little Flowers of a purple Colour, in Form of Stars; and after them, thin flat Pods, in which are contain'd five or six small Seeds, likewise flat, broad at one End, and sharp at the other; and these Pods are what we call *Senna Husks*.

As *Senna* is a Leaf that is very common among us, from the great Sale of that Commodity, I must inform you there are three Sorts, which we distinguish into *Alexandrian Senna*, *Tripoli Senna*, and *Mocha Senna*; and under these three Kinds there are several other Species, which have no Difference, but from the Places where they are cultivated, as the same Species may have a Variety in the Leaves, Flowers, and Fruit, from the Nature of the Soil where it is cultivated: The finest Sort, and best in Quality, is the *Alexandrian Senna*, that comes from the *Levant*, which pays a Tribute to the Grand Signor; this the *Turks* call *Palie*.

Chuse this *Senna* with narrow Leaves, of a moderate Size, of the Shape of a Spear Point, yellowish colour'd, of a strong fragrant Smell, in a

manner sweet, the least broke, full of Sticks or dead Leaves, or any other Filth that may be. This Description of *Senna* will undoubtedly appear ridiculous to some People, who have no great Knowledge of it, who will have it that the best *Senna* is that with great, broad, green Leaves : But I am satisfied that no body that understands *Senna* will contradict what I say ; and the rather, because I must be allow'd to be a Judge of it, from the vast Quantities of this Drug that have pass'd thro' my Hands ; besides that, I have by me the entire Plant, from whence the Figure is engrav'd, as it was brought to me from *Aleppo*. The Use of *Senna* is so common, it would be needless for me to say any more, than that it is a very good Purgative.

The second Sort of *Senna* is that of *Tripoli*, which is a green *Senna*, sold sometimes, but very rarely. It comes next in Virtue to the *Alexandrian*, but is usually more churlish, and has very little Smell ; notwithstanding which, it is bought up by those who understand little of it.

The third Sort is the *Mocha Senna*, which the Hawkers call *Pike Senna*, because the Leaves are long and narrow, that is to say, twice as long as the true *Senna* from the *Levant*. The ill Quality of this *Senna* is sufficient to warn you against the meddling with it all ; for it is good for nothing.

As to the *Folliculi*, or *Senna-Husks*, their Excellency ought to engage the Physician to prescribe them more frequently, because they purge very gently, and scarce give any Taste or Smell to the Medicine, contrary to the Leaf, which gives so bad a Taste, that most People refuse to take the Medicines made with it. Chuse these Shells thick, large, and of a greenish Colour, with the Seed which is within plump, well fed, and almost like the Stones of Raisins, only flat. Throw such away as are blackish and dry'd, as not fit for internal Use. You may make an Extract of *Senna*, by Means of Fire and Water, and also a Salt, to which some People assign great Virtues, and pretend by its Help to make Infusions of *Senna* of greater Force and Efficacy. Some Authors have writ, that there is Plenty of *Senna* to be found in *Italy*, especially in *Tuscany*, and about *Genoa* ; but I believe that these Kinds of *Senna* are rather the Leaves of that Plant which the Botanists call *Colutea*, or the Wild or Bastard *Senna* ; an Account of which may be seen at large in Botanick Authors.

There is a Plant found in *France*, which the Botanists call *Gratiola*, which purges more than *Senna*. There is, besides, another Plant, which the Simplers call *Alypon montis Ceti*, because it is found plentifully at *Cette* near *Montpellier*, which

purges more than *Senna* : Some call this *Alypon*, White Turbith.

Senna, Folium Orientale, or *Sena*, is a little longish Leaf, which is brought Lemery. dry'd from several Parts of *Europe*. It grows on a small Shrub, and is of two Kind. ; the first is call'd *Senna Alexandrina*, five foliis acutis, the *Alexandrian Senna*, or that with sharp-pointed Leaves, by *Baubine* and *Tournefort* : It carries its woody Stalks a Foot and a half, or two Feet high ; from whence come Leaves that are oblong and narrow, pointed, of a yellowish green ; the Flowers are made up of five Leaves each, after which come flat crooked Pods.

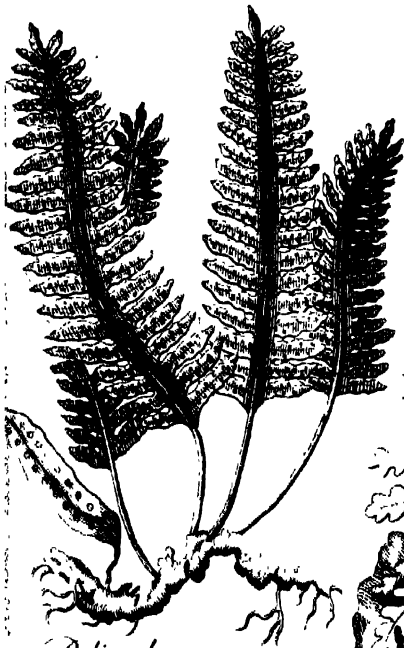
The second Sort is call'd *Senna Italica*, five foliis obtusis, by *Baubine* and *Tournefort*, or *Italian Senna* with blunt Leaves : It differs from the former, in that the Leaves are larger, more nervous, broad, and blunter at the End. We are furnish'd by the Merchants with three Sorts of *Senna* ; the first and second of which are call'd the *Levant Senna*, and the last *Mocha Senna*, as *Pomet* has described them. The Leaves and Pods of all the Sorts afford a good deal of Oil and Salt.

Other Accounts of *Senna* distinguish it into True and Bastard ; the True is of three Sorts ; first, the *Alexandrian*, with sharp-pointed long Leaves, fresh Smell, strong Scent, free from Stalks, smaller or narrower than the other Kinds, of a lively Colour ; this is the best of all. 2dly, That of *Aleppo*, which is generally fuller of Stalks and Dust, and has a shorter and blunter Leaf than the former. Chuse that which has a good strong Smell, of a pale green Colour, well cleans'd, and not musty : This is next in Goodness to the former. 3dly, The *Indian Senna*, which is much like that of *Aleppo* in Form, is the coarsest Sort of all, and the worst, and becomes something worse and weaker by reason of its long Carriage from the *Indies* hither, being often heated in the Hold of the Ship, where it is spoil'd. The Bastard *Senna* is the *Colutea*, or Wild *Senna*, spoken of before.

The Leaf of the best *Senna* is the most famous and common Purge against serous Humours and Melancholy, which it discharges from the Head, Stomach, Lungs, Liver, Spleen, Womb, and Joints ; but it gripes sometimes, by reason of the sharp Humours from the Body that join with it, and upon which it acts. It is corrected with Cinnamon, Cloves, Galingal, Ginger, &c. It is a general Purger, and may be quicken'd in its Operation by *Sal Gem*, Salt of Tartar, and Tartar Vitriolate : It is seldom given in Powder, but in Infusion or Tincture, from half an Ounce to two Ounces. There are eighteen or twenty Preparations

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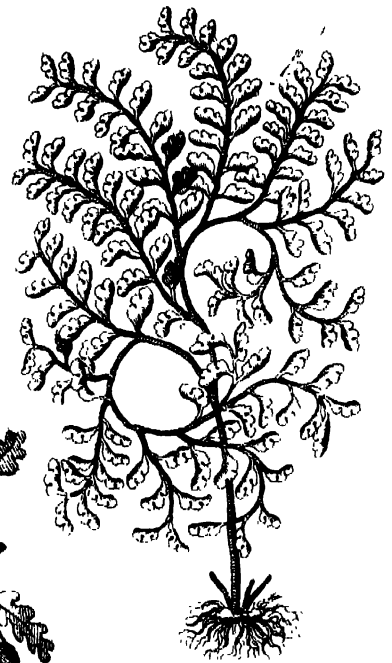
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Polipody



Ceterach of y Shops



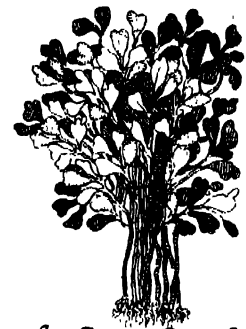
Maidenhair of Canada



Maidenhair of Montpellier



Scolopendrium



Salvia Vitæ or Wall Rue

rations of this Leaf in Use, in the most common Dispensatories, as the Extract *Benedictum*, *Decoctum Sennæ Gerconis*, *Quercetan's Cathartick*, and the like.

[The best and right *Senna* of the Shops, is the Leaf of the *Senna Alexandrina*, *five foliis acutis*; B. Pin. 397. *Senna Orientalis*, Ger. 1114. It grows in Syria, Arabia, Persia, and Egypt: The Leaves of this are narrow and pointed.

The worse Sort of *Senna*, too often sold in the Place of this, is the Leaf of the *Senna Italica foliis obtusis*, Boech. Ind. Alt. 2. 57. *Senna Italica*, Park, 225. The Leaves of this are roundish and something Heart-fashion'd at the End. [It purges less, but gripes more than the true *Senna*.]

7. Of Maidenhairs.

Pomet.

THE Maidenhairs are little Plants that are brought whole to us from several Parts; the chief and most esteem'd, is that which comes from *Canada*, and is call'd *Maidenhair of Canada*, and, by Botanists, *Adiantum album Canadense*, or the *White Canada Maidenhair*. This grows about a Foot high, with a very slender Stalk, hard and blackish; from whence there arise small Branches bearing green Leaves, pretty deep indented, as may be seen by the Figure: It grows likewise in *Brasil*: This is cultivated with great Care in the King's Garden at *Paris*, as well as many other Sorts of exotic Plants, which were brought from several Parts of the World by Messieurs *Fagon* and *Tournefort*, the most eminent Botanists we have had.

Besides the *Maidenhairs* which we have from *Canada*, we have also the Syrup sent to us, which to be of the best Kind should be Amber-colour'd, of a good Taste and Consistence, smelling neither sour nor musty, truly made in *Canada*, and as clear and transparent as possible.

Great Virtues are attributed to this Syrup, especially for Coughs, Catarrhs, and Diseases of the Breast; it is also administer'd to Infants new-born, with a little Oil of Sweet-Almonds. As to the Choice of *Maidenhair*, you must take such as is newest, very green, and the least broke that you can get.

Besides this *Maidenhair* and the Syrup, we have from *Montpellier* another Kind of Syrup, call'd *Capillaire*, which is made from a Plant the Botanists call *Adiantum album Montpensense*, or the *White Maidenhair of Montpellier*. The Syrup of this is little different from that made of the *Canada Maidenhair*; when faithfully prepar'd, it ought to be of an Amber-Colour, and a very agreeable Taste. There are other Syrups of *Maidenhair*, and the like, prepar'd in the South-

ern Parts, as of *Black Maidenhair*, *Golden Maidenhair*, *Scalopendrium*, and *Caterach*; some add *Polypody*, *Salvia Vitæ*, or common *White Maidenhair*, and *Liquorice*; and all these Plants together make a red Syrup, which they sell as well as the Syrup of *Maidenhair*. Some Apothecaries distil a Water from the *Maidenhair*, and make a white Syrup of it, which is very well, but it has no more Virtue than a plain Dissolution of Sugar. Sometimes there comes from *Montpellier* a liquid Conserve of *Maidenhair*, but it is very scarce, and little enquir'd for. As to the Preparations of the Syrups, I shall say nothing further; but those who would make the Syrup of *Maidenhair of Canada* or *Montpellier*, may consult such Books or Dispensatories as treat of them.

Adiantum, or the true *Maidenhair* of the Shops, is a Plant that bears several slender, blackish Stalks, of about half a Foot, or a Foot high, divided into fine delicate Branches, which are adorn'd with little Leaves, like those of Coriander, almost triangular, fragrant, and of an agreeable Taste: This Plant bears no Flowers; its Fruit, according to *Mt. Tournefort's* Observations, is produced in a Folding of the End of one of the Leaves; which after it is stretched out, encloses several spherical Coverings which are caked to the said Foldings, and cannot be discover'd but by the Assistance of a Microscope: These *Capfulæ*, or Coverings, are furnish'd with, as it were, a Purse-String, which by its Contraction opens them; they contain some little Seeds in them that are almost round: The Root is fibrous and black; it grows in shady, moist, or stony Places, against Walls, or Sides of Wells and Ditches: The best they have in *France* grows about *Montpellier* in *Languedoc*.

It is brought likewise from *Canada*, *Brasil*, and several other Parts of *America*, where there is a Sort of the dried *Maidenhair*, a great deal larger than ours, call'd by *C. Baubine*, *Adiantum fruticosum Brasilianum*, and is the same with the *Maidenhair of Canada*: The Stalk is slender, hard, and of a brownish red, or purple Colour, tending to black, divided into many Branches, which bear little Leaves, almost like the common Sort, long, and indented on one Side; but whole on the other, soft, tender and fragrant; this is what is most valued, as being the best scented of all the *Maidenhairs*. It is common in several Parts of *America*, and especially in *Canada*; so that the Traders pack up their Goods with it instead of Hay, when they would send them to a distant Country; 'tis by this Means we have such Quantities of it; but it would be much better if they would pack it up in Paper, or Bags, which would preserve the Scent and Virtue of it. Chuse

Such as is fresh, green, well scented, whole and soft to the Touch. This Plant contains little Phlegm, a good deal of Oil, but not much Salt; they are pectoral, aperitive, and raise the Spittle, sweeten the Blood, and provoke Womens Courses. They give the Name of *Maiden-Hair* to four other Kinds of Plants, which in some Measure resemble the *Adiantum*, and to which they attribute the like Virtues, viz. *Filicula*, *Ceterach*, *Wall-Rue*, and *Polytrichum aureum*, or *Golden Maiden Hair*.

The *Adiantum Aureum minus*, and *Politrichum mobile vel primum*, is a little Plant about the Length of a Man's Finger, bearing many Leaves, on Stalks almost as fine as Hair, of a yellowish Colour; the Stalks bear on their Tops little longish Heads; the Roots are very little like small Threads: This Plant grows in the Woods, and against old Walls, and in Bogs and marshy Places; it is a good Sudorifick and Antipleuretick, being infused half a Handful in a Pint of boiling Water, as you make Tea, and used after the same Manner.

Polytrichum vulgare, or the *Trichomanes* of the Shops. M. Tournefort has discover'd with his Microscope, that this Plant, as well as the *Adiantum*, bears a little Seed roul'd up in the End of the Leaf, which is very small, and almost round, cover'd on the Ribs with a great many light Particles like Dust; the Roots are very small and stringy; it grows like the other Sort, and is reckon'd a good Pectoral, aperitive and proper for Obstructions of the Liver and Spleen, and in Womens Cases.

Ceterach of the Shops, or the true *Scelopendrium*, is a Kind of *Maiden Hair*, or a Plant whose Leaves resemble, in some Manner, *Poly-pody*, but they are much less, cut in almost round; their back Parts are reddish or yellow, hairy, and cover'd with a little scaly Matter: M. Tournefort has made a Discovery of a Seed in this Plant unknown before: This grows in wild Places in hot Countries; and those of *Languedoc* call it usually *Golden Locks*, because of its near Approach to Hair and its golden Colour. It is pectoral, and particularly appropriated to the Diseases of the Spleen, and is a good Aperitive.

[The true *Maiden Hair* is the *Adiantum foliis Coriandri*. C. B. 355. *Capillus Veneris Verus*. Ger. 982. This grows in France and Italy.

The *Canada Maiden Hair*, which is another Species of this, is the *Adiantum fruticosum Brasiliense*. C. B. Pin. 355. *Adiantum fruticosum Americanum summis ramulis reflexis & in orbem Expansis*. Pluk. Almag. 10.

The other Kinds used in Medicine, or kept in the Catalogues of Official Plants, are

1. The *Polytrichum Aureum majus*, C. B. P.

356. This is a large erect Moss, and different in Form from all the *Maiden Hairs*.

2. The *Trichomanes*, Park. 1051.

3. The *Adiantum Album*. Rai. Hist. 1. 146.

4. The *Adiantum nigrum vulgare*. Park. 1049. And

5. The *Adiantum Album sive Filicis*. J. B. 6.

741. *Dryopteris Alba*. Ger. Emag. 1835.

The *Ceterach* mention'd in this Chapter is the *Asplenium sive Ceterach*. J. B. 704. And is not properly a Species of *Maiden Hair*.

These were all once in great Esteem, as Pectorals, Balsamicks and Restoratives; but have of late lost much of their Credit, and are now seldom seen in Prescription.

8. Of Sea-Bind-Weed and Winter-Green.

Soldanella, or *Conostylis Maritima nostras*, of M. Tournefort: The *Pomet*. *Sea-Bind-Weed* is a small Plant, whose Roots are slender, and the Leaves like those of the *Aristolochia*, or *Birchwort*, except that they are less and something thicker; among these grow Flowers, very much resembling those of the common *Bind-Weed*, of a purple Colour. This Plant is brought to us entire from Maritime Parts, where it grows in Abundance; 'tis much used in Medicine, to purge off dropical Humours; for which Reason Mr. Brice Bauderon made it very properly an Ingredient in his hydragogue Powder: You need take no further Care about the Choice of it, only that it be new and as little broke as possible. Beside this *Soldanella*, we sell another Herb call'd *Pyrula*, or *Winter-Green*, of which there are two Kinds, a larger and a smaller; its Leaves something resemble those of the Pear-Tree, from whence it takes its Name, and is also call'd *Winter-Green*, because it preserves its Verdure all Winter, in spite of the hard Season. It is a Plant pretty common in some Places, as Germany, and other cold Countries. And as this Plant is something scarce in these Parts, our Herbalists sell to those who want it the young Leaves of the Pear-Tree, raised from Seed, which it is not easy to detect, because of the great Likeness between one and the other: 'Tis said the Decoction of this is a very great Astringent, and that it is very proper for the Cure of Ulcers, and other Maladies of the like Nature.

The *Pyrula* bears several little Stalks, at the End of each of which is a small roundish Leaf of a brownish Green; from the Middle of the Leaves arises a Stem, whose Top is adorn'd with many little white Flowers, of a very good Smell, and the whole Plant is not above a Foot, or a Foot and a half high; it delights much in the Northern

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7



English Maidenhair

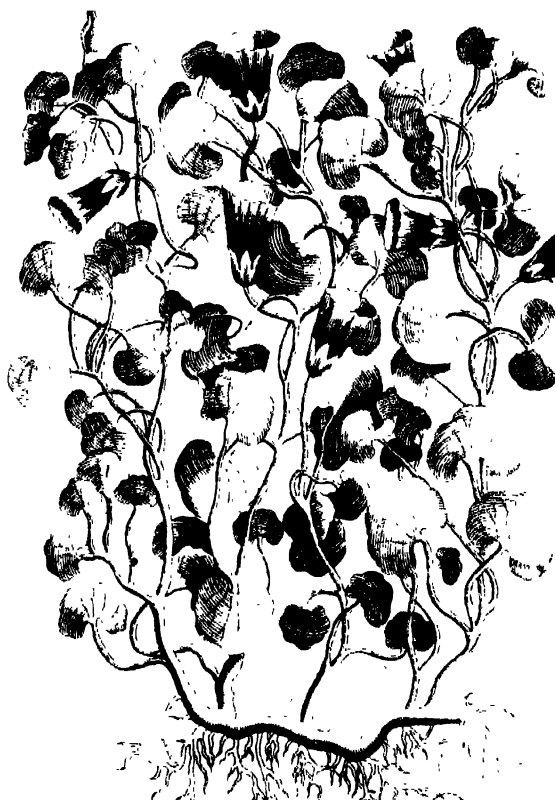


Black Maidenhair



Pirola or Winter-green

8



Sea Celerwort or Bindweed

J. Beckington. s

Book 5.

Oversee of the Negroes.

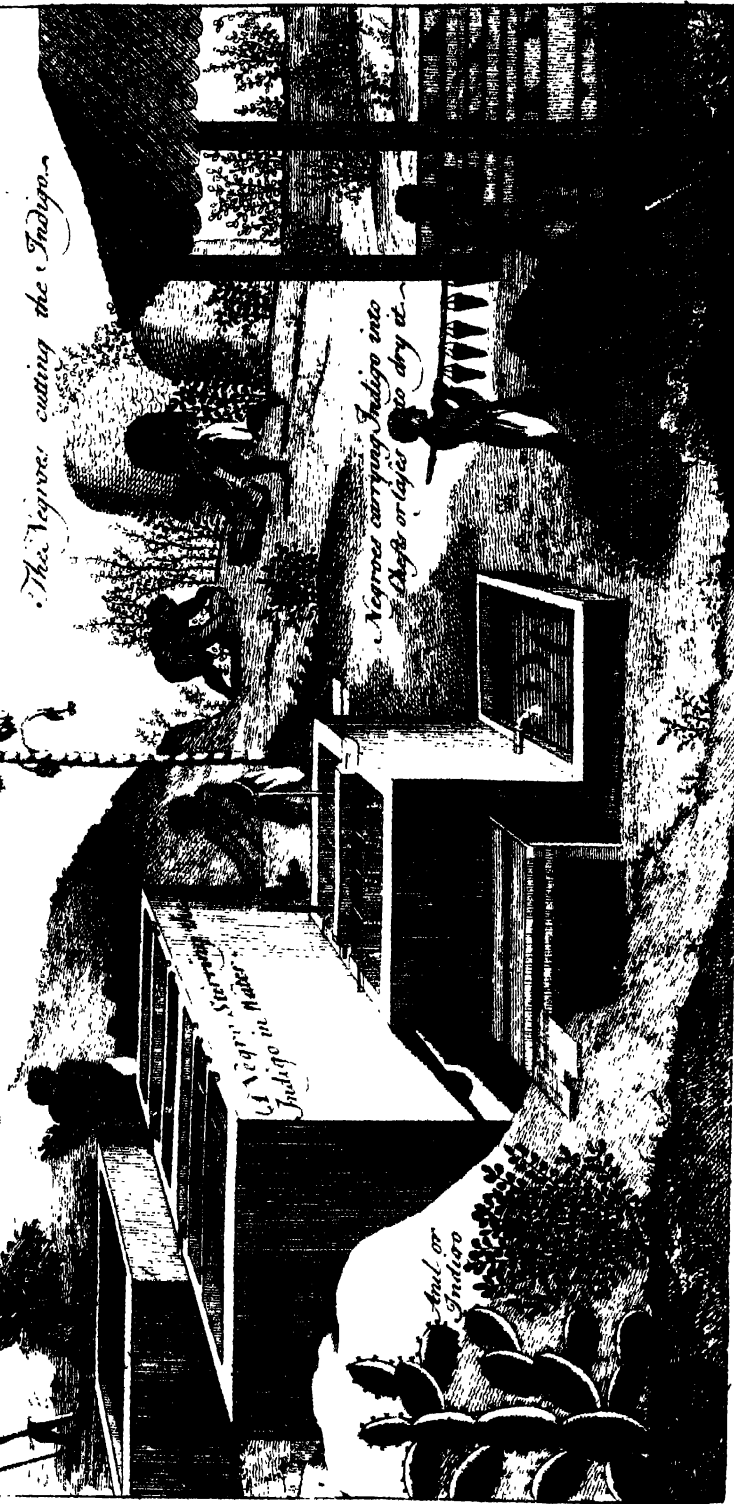
The Negroes throwing the Indigo into the Water.

The Negroes cutting the Indigo.

Negroes carrying Indigo into the Dye or Lye to dry it.

And or Indigo

L. B. Beckman Sculp.



Northern Countries, which makes it very rare in France, and other warm Climates.

Soldanella, Brassica Marina, Sea Lemery. Colewort, or *Cerastium Maritimum nostras* according to Tournefort, *Sea-Bind-Weed*; is a Species of *Bind-Weed*, or a small Plant that sends forth slender, winding, reddish Stalks, that creep upon the Ground. The Leaves are almost round, smooth, shining, like those of the lesser *Celandine*, but thicker, full of a milky Juice, tied by long Tails, the Flowers are in Form of a Bell, with the Mouth turn'd upwards, as other Kinds of *Bind-Weed*, and of a purple Colour: When these are gone they are succeeded by a Fruit that is almost round and membranous, which contains a corner'd Seed, black or white; the Roots are small and fibrous: The whole Plant has a bitter Taste, and is a little salish; it grows near the Sea-side, and flowers in June. They dry it entire with the Root, and so it is transported: Chuse such as is fresh or new, as little broke as may be; it yields a great deal of essential Salt and Oil, purges violently, and is used in Dropsies, Palxies, Diseases of the Spleen, Scurvy and Rheumatism: The Dose is from a Scruple to a Dram.

Pyrola, Winter-Green or Sea-Green, is a Plant of which there are several Kinds. I shall only take Notice of two that have some Use in Physick: The first is call'd *Pyrola nostras vulgaris*, by Parkinson, or *Pyrola rotundifolia major*, by Tournefort, the greater round-leav'd *Winter-Green*. It bears from the Root five or six Leaves, supported each by a long separate Foot-Stalk, by which they trail upon the Ground; from among these rises a Stem, about a Foot high, furnish'd with several little pointed Leaves, which bear on the Top sweet-scented Flowers that are very beautiful to the Eye, compos'd each of many Leaves, in the Shape of a Rose, of a white Colour, having something rising in the Middle that resembles an Elephant's Snout, which, after the Flower is gone, becomes an angular Fruit, divided into five Cells, fill'd with a Seed that is as small as Dust; the Root is thin, fibrous and winding, all the Plant of a bitter Taste and very astringent.

The second Sort is call'd *Pyrola minima*, or *Pyrola rotundifolia minor*, by Tournefort, the lesser round-leav'd *Winter-Green*. It differs not from the former, but only as it is less in all its Parts. These Plants grow in mountainous Places, in Woods and Shades, about Geneva, in Germany, Bohemia, Moravia, and other Northern Countries, from whence the dried Leaves are brought; but they are very scarce at Paris: Take Care lest the Merchant, too greedy of Gain, mix young Pear-Tree Leaves with them, which it is not easy to distinguish. They are both very

astringent, vulnerary, cooling, proper in Fluxes of the lower Belly, Hemorrhoids and Inflammations of the Breast, being taken in Infusion or Powder; they are likewise used externally in Plasters and Ointments, to stop Blood, and to dry up Wounds.

[The first of these Plants is the *Soldanella Maritima minor*. C. B. Pin. 293. *Soldanella vulgaris, subulis Marina*. Park. 161. It grows on the Sea Shores, and flowers in June.

The Second is the *Pyrola nostras vulgaris*. Park. 508. *Pyrola rotundifolia major*, C. B. Pin. 191. And the other Species of this the *Pyrola folio mucronato serrata*. C. B. Pin. 181. *Pyrola tenerior*. Park. 509.

But neither of these are now ever heard of in the Shops.]

9. Of Anil, whereof Indigo is made.

THE *Indigo* Plant grows about two Feet high, with round Leaves, of a Green, inclining towards Brown on the upper Side of the Leaf, and Silver-colour'd underneath, and pretty thick; after which come Flowers almost like those of Pease, of a reddish Colour, from whence come long crooked Pods, resembling a Sickle, which enclose a little Seed in them, like Radish-Seed, of an olive Colour.

When the Americans sow this Plant they first dress the Ground, and afterwards make Holes in it about a Foot Distance one from another, and into each Hole they throw ten or twelve of these Seeds, which they cover lightly with Earth, and in three or four Days Time this little Seed will be sure to appear, especially in a wet Season; and in two Months, or six Weeks sometimes, this Plant will be ready to cut and make *Indigo* of, as the Sequel will shew; and, if it is left in the Ground, in three Months Time it will yield both the Flower and Seed: What they fear most, upon account of this Plant, is a Kind of Caterpillar, which in St. Christopher's they find sometimes to breed in a Night, and ruin all the promising Hopes of the Inhabitants: The Way they have to remedy this is, immediately to cut down all the Plant, and throw it into a Vat, or Tub, with the Caterpillars and all, which also are of some Service. The other Way to remedy this Misfortune is, to clear a large Space betwixt what they have eat, and what they have not touch'd: This Havock is not seen in Martinico.

Indigo is a Fecula, or Settling, made by means of Water and Oil-Olive, out of the Leaves of the *Anil*, or *Indigo-Plant*: There is a Difference between that made of the Leaves only, and that which is made of the Leaves and small Branches.

The

The choicest of the former Sort is that which bears the Sur-Name of *Serquiffe*, from a Village of that Name, which is twenty-four Leagues from *Surat*, and near *Amadabat*. It is made likewise about *Biana*, and *Cossa* near *Agra*, also in the Kingdom of *Golconda*: The *Dutch* also bring some of it from *Brampour* and *Bengal*, but that is the least valuable of all.

When the Inhabitants of the Places above-nam'd would make the *Fecula* of *Anil*, in order to make *Indigo* of it, they cut the said Herb with a Sickle, when the Leaves begin to fall upon touching them; and after they have stripp'd them from the Branches they put them into a sufficient Quantity of Water, which is in a Vessel call'd the Steeping-Vat, there letting them infuse thirty or thirty-five Hours; after which they turn the Cock in order to let the Water run off, which is become of a green Colour, inclining towards Blue, into a Vessel of the Nature of a Churn, where it is work'd by a Negro, by Means of a Rouler, or Turner of Wood, the Ends of which are pointed and faced with Iron; this they work 'till the Water abounds with a Lather, then they cast into it a little Oil-Olive; to wit, one Pound into such a Quantity of the Liquor as will yield seventy Pounds of *Indigo*, such as we sell; and as soon as the said Oil is thrown in, the Lather separates into two Parts, so that you may observe a Quantity curdled, as Milk is when ready to break; then they cease working and let it stand to settle; which when it has done some Time, they open the Pipe or Cock of the Vessel, in order to let the Water clear off, that the *Fecula* which is subsided may remain behind, at the Bottom of the Vessel, like Dirt of Lees of Wine: Then taking it out they put it into Straining Bags of Cloth, to separate what Water was left; then they convey it into Chests or Boxes that are shallow, to dry it; and being dried, it is what we call *Indigo*, and that Name is given to this, in all Appearance, because it comes from *India*. Sometimes the *Indians* make their *Indigo* in a Sort of Ponds, made in Form of a Basin, which they prepare with Lime, that becomes of an equal Hardness almost to Marble.

Chuse the *Indigo* of *Serquiffe*, in flat Cakes, of a moderate Thickness, neither too soft nor too hard, of a deep Violet Colour, light, and such as swims on Water, and when broken has no white Spots in it; and lastly, such as is copperish or reddish on being rubb'd with one's Nail, and has the least Dust or broken Pieces among it.

We have no Sort of Commodity liable to more various Ways of being sophisticated, or counterfeited, than *Indigo*, when it bears a good Price; which, if I should attempt to relate, it would

make a small Volume of itself; but I do not think it necessary, since it is easy to distinguish that which is good from the bad, by what I have been directing about its Choice.

We have another Sort of this, call'd *Chestnut Indigo*, or *Agra Indigo*, which is almost as good as the *Serquiffe*; but as the Form does not recommend it to all the World, it is only in Use with the Dyers. There come to us, beside this, several other Sorts of *Indigo*, which have no other Difference than what arises from the Places where they are made, and the different Seasons and Age of the Herb from which they are made; for the *Indigo* made of the Plant of the first Gathering is better than that of the Second, and the Second better than the Third; the younger the Leaf is which is used, the finer the *Indigo* is, being of a more lively, shining, violet Colour.

The Use of the *Indigo* is for the Dyers and Laundresses, serving the last to put among their Linnen. The Painters use it to grind with White, for painting in Blue; for if it is used alone, and neat, it turns black; ground with Yellow it makes a Green. Some Confectioners and Apothecaries very preposterously employ this, to colour Sugars to make Conerves with, and Syrup of Violets, by adding some Orrice; but there is no danger of being thus cheated if the Syrup is bought of reputable Persons.

10. Of the other Sort of Indigo.

THIS *Indigo* is also the *Fecula*, made from the *Anil*, which differs not from the former, but as it is made of the whole Plant, Stalk and Leaf; the best of which Kind is that which bears the Name of *Gatimalo*, which comes from the *West-Indies*. It ought to be light, moderately hard, reddish upon one's Nail, such as will swim upon Water; and, in short, to come as near the other Kind as may be. The surest Proof of its Goodness is its burning upon the Fire like Wax, and leaving only a little Ashes behind.

The second Sort of this *Indigo* is that of *St. Domingo*, which differs not from the *Gatimalo*, only that it is not of so lively a Colour. The third is the *Jamaica Indigo*, that is brought to *England*. The fourth is that of the *Leward-Isles*; all the Sorts are better or worse, according as they are more or less neat and pure; for those who make this, mix it sometimes with Sand or Dirt; but the Cheat is easy to discover, in that the *Indigo*, which is fine and neat, will burn like Wax; and when this is burnt, the Earth or Sand will be left behind. M. *Tavernier* observes, in his Book, Page 242. that the *Indigo* Dust is so subtil, and so penetrating, that those who sift it are obliged to

Book 5.
of Leaves.



Dyers Weed.



Woad.



Turnsole.



Curriers

Sumach.

to have their Face cover'd, and drink Whey very often: And to confirm this, and make good the Penetration of the Juice of *Indigo*, he says, having put several *Indigo* in a Bag, in the Morning, near the Sisters of *Indigo*, and at Night breaking it, the *Indigo* has pass'd thro' with a blue Colour. This is used only by the Dyers.

Indigo, *Gilt*, *five Nil*, *herba rorisma-*
Lenery, *rim* *facies*, or *Indigo-Herb* resembling

Rosmary, is a Plant of *Brazil*, about two Feet high; the Leaves round and pretty thick. The Flowers are like those of *Pease*, reddish, and succeeded by long crooked Pods, containing in them Seeds like *Radish-Seed*, of an Olive Colour. All the Plant has a bitter piquant Taste. Of this they make *Indigo* [as described by *Pomet* before.] The Leaf is reckon'd vulnerary, and proper to deterge and cleanse old Ulcers, being applied to the Part in Powder; likewise there may be a Frontal made of it to assuage and abate Pains in the Head.

The *Indicum*, so call'd, because this is prepared only in the *Indies*, is a blue Flower or Meal, brought from thence, made only of the Leaves of *Anil*, by the Means of Water and a little Olive-Oil, [as taught before.] There are several Kinds of it, but the best is that of *Serquisse*, call'd so from a Village of that Name, where it is made. The next is that of *Agra*, made in Shape of a *Chcniut*, from whence it is call'd so.

There is a Meal made of *Anil*, that is only distinguish'd from the *Indicum* spoken of before, as being made out of the entire Plant. Chuse such of this as is the lightest, neat, and clean, moderately hard, and of a fine bright Colour, and that will swim upon the Water, and flame in the Fire 'till it is almost all consumed.

[The Plant, from which *Indigo* is made, is the *Indigo vera Colatæ foliis utriusque Indiae*. Phil. Trans. 276. *Nil five Anil five Indigo Indica*. Hist. Ox. 2. 207. *Emerus Americanus Siliqua incurva*. Tourn. Inst. 666. It is common both in the *East* and *West-Indies*. It has been generally esteem'd a *Boisson*, and the Use of it is strictly prohibited by the Electors of *Saxony*; some Physicians, however, have prescribed it in the Jaundice and some other Cases.]

11. Of Woad, or Dyers Herb, and other Herbs used in Dying.

THERE is cultivated in *France*, especially near *Thouluse*, a Plant which is call'd in *Latin*, *Isatis*, or *Woad*; and by the *French*, *Pistel*, *Gresle*, and

Seresh. They make a Merchandise of this Plant, which bears some Resemblance or Affinity to *Indigo*, not with regard to the Herb or Form it is brought in, for it looks like *Barth*; but as it is made from the Leaves of *Woad*, as the *Indigo* is made from *Anil*.

This *Woad* is very heavy, it is used by the Dyers. For making of it, the young Leaves are cut at the End of *February*, or at the Beginning of *March*, and then put into Places to heat and rot, moistening them with Water, and stirring them twice a Week; and when the Herb is reduced in a Manner to Dirt, and become dry, they put it into a Corner, and lay in its Place a second Crop of the Leaves, which have sprung up since this was rotting: When this Crop is rotted in like Manner, they put it to the first, and bring in a third Crop, and afterwards a fourth, for they continue cutting it 'till the End of *September*, at which Time they make the fourth and last gathering; and this it is which makes it of that bad Quality, and fills it so with Dirt; for the *Woad* made of the first Cutting is much more efficacious than that which is mix'd with what is cut in *September*, as well because it is mix'd, as that the Leaves are much harder, and fuller of Sand and Gravel, occasion'd by the Winds and Rain, which happen during that Season.

The Dyers that use this Commodity, dry the Dross or Scum of it; which, when dry, bears some Resemblance in Colour to *Indigo*, and is sold by the Name of *Endigo Flower*, which has given Occasion to Authors that understood not the Commodity, to take this for true *Indigo*, as *Dalcham* and others did. One may see by the present Description, that it is possible of the young or first Leaves of this Kind of *Woad* to make a blue Flower, or Meal, like the *Indigo*. Beside this *Woad*, they bring from *Picardy* a Plant which the Dyers call *Yellow-Weed*, and the *Latins* *Luteola*. We have also another Sort that comes from *Provence*, for the Use of the Dyers, the Leaves and Stalk whereof are green, which is what the *French* call *Seresh*, from the *Arabian* Word *Seresh*. This Plant is likewise call'd *Dyers-Weed*, or *Small Broom*; and by the Inhabitants of the *Someries*, from whence it first came, *Orisel*.

Beside the Plants already mention'd, we bring from *Portugal*, especially from a Place or Sea-Port call'd *Porto*, a certain Commodity, which is nothing else but Leaves and young Branches of a Tree we call, after the *Arabs*, *Sumach*, beat or pounded; and is the same that is often call'd by the Leather-Dressers, *Rouffe*. This Commodity is in great Use among the Tanners, Dyers and Curriers, to dye green with.

The best *Sumach* for dying is that which is greenish and new. This Commodity obtains the Name of *Port of Port*, from the Place it comes from, being *Porto*. Beside the great Use which the Dyers make of the Leaves of this, we use the Fruit, which grows in Clusters, and is of a very fine red, and a sharpish Taste; it is an excellent Remedy for the Flux of the Belly, being boil'd in Water with the Pomegranate Bark. The Fruit, ston'd and dried, are what we call *Sumach-Berries*; they have the same Physical Virtues, except that they are not so strong, because of their being dried. They will not keep good above a Year, because their Sharpness and Astringency are then lost.

12. Of the Dutch Turnsole in Paste and in the Cake.

THE *Dutch Turnsole* is a Paste made, according to the best Information I can get, of the Fruit or Berry of a Plant which the Botanists call *Heliotropium Tricoccum*, or *Turnsole*, (which grows plentifully in several Parts of *Holland*) of *Perelle*, or a dry'd Earth that is brought from *Auvergne* in *France*, Lime and Urine: After having mix'd these four Drugs together, they put them into little Barrels that hold about thirty Pounds. Those that make the *Turnsole* in Paste, do not sell it always soft, but sometimes in Form of square Cakes of Bread, which, after it is dried, is what we call *Turnsole* in the Cake; as when the Paste is new made any Thing will mix and be hid in it, the *Dutch*, and others, seldom fail to throw in a Quantity of Sand, to encrease the Weight; and that's the Reason that the *Turnsole* in Cake, or that which is dried, is reckon'd better than the soft. This Cake *Turnsole* ought to be dry, of a Violet blue; and striking a blue, and not a red Colour, on Paper.

It is used by the Dyers, Cardmakers, and others, instead of Indigo.

13. Of Turnsole in Rags.

THE *Turnsole* in Rags, is so call'd because it is nothing but Rags which have been colour'd red with the *Turnsole* Fruit, by the Assistance of some Acid. What is commonly sold in the Shops is nothing but old Rags, or old Linnen, dipp'd either in the Juice of the blood-red Grape, or that of Mulberries, and so dried in the Sun: But this is a Cheat, or an Abuse of the first Design; for the true *Turnsole* ought to be dipp'd in the Juice of the Berry of the Herb call'd *Turnsole*. This Plant, which we call *Turnsole*, the *Greeks*

call *Heliotropion*, the *Sun-Flower*, because its Flower always turns to the Sun. It bears Berries always three set together, not much unlike the *Patina Christi*; whence it is call'd by *Pliny*, *Heliotropium Tricoccum*, the *Turnsole* with three Berries, which, when they are at their full Maturity, have within them, between the outward Skin and the Kernel, or Seed, a certain Juice, or Moisture, which being rubb'd upon Paper or Cloth, at first appears of a fresh and lively green Colour, but presently changes into a Kind of bluish purple; and the same Cloth afterwards wet in Water or White Wine, and wrung forth, will strike the said Water or Wine into a red or Claret Wine Colour; and these are the Rags or Cloth which are the true *Turnsole*, and ought to be sold in the Druggists Shops, wherewith People colour Gellies, Conerves, Tinctures, &c. as they please; as also to colour all Sorts of Spirits and the like, that have of themselves no Colour.

[It is to be observed, that the Fruit of the *Turnsole* makes of itself a very fine blue, but on being touch'd with any Acid, it becomes red; therefore, when we have a Mind to try whether any Thing contains an Acid in it, we need to do no more than touch it upon something that has been stain'd by this Fruit.]

Of the Turnsole Rags from Lyons.

That of *Lyons* is compos'd as the other, of *Perelle*, quick Lime, and Urine, to which some add a Tincture of *Brazil-Wood*, in order to give it a finer deep red. This is made frequently about *Lyons* and *Auvergne*; it ought to be deep-colour'd, and when rubb'd upon Paper the Colour very lively.

The *Isatis domestica*, sive *Glastrum*, *Latifolium* of *Tournefort*, in *English*, *Lemery*, the *Broad leav'd Wood*, or *Dyers-Weed*, is a Plant that bears its Stalks three Feet high, as thick as the little Finger, round, hard, smooth, reddish, divided towards the Top into abundance of Branches, cloth'd with a great Number of Leaves, dispos'd without Order, that are oblong and large as those of Hounds-Tongue, without Hair, of a deep green Colour, and sometimes tending to a Sea-green. The Branches are furnish'd with a great many little Flowers, compos'd of four yellow Leaves, like a Cross, tied by a slender Foot or Stalk. When the Flowers are gone there arise in their Places little blackish Fruit, divided into Tongues, flat on the Sides, containing each two oblong Seeds. The Root is about a Foot and a half or two Feet long, an Inch thick at the Top, and growing smaller by Degrees downwards, white and woody. It is cultivated

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Plate 37



Tobacco, is so call'd because the Leaves grow in the Shape of a Tongue, is very much esteem'd, because it is not at all subject to waste away and damage. These two first Sorts are what are most commonly sold. The *Venice*, or Musk *Tobacco*, is much less than the two former. The Leaves are a little rougher, more wrinkled, and pointed at the End, than the others. It is, in Proportion, the least of all, and is the most inclinable to decay, yet the most valued, and the dearest, because the Leaves have not only a Musk Scent, but the Smoke is perfum'd in the burning of it, with a very agreeable Odour, as that of the other *Tobacco* is unsupportable to a great many People. But what is further remarkable, is, that one Plant of this musk'd *Tobacco* will communicate its Virtue to four others, so as to make them pass for the same; which is usually practis'd in the Places from whence it comes. Tho' the Manner of cultivating, and afterwards making *Tobacco*, be commonly known among the Inhabitants where it grows, it may yet be satisfactory to a great many curious Persons in these Parts of the World, to have as succinct an Account writ of it as may be.

They first of all sow the Seed, which is mix'd with five or six Times as much Ashes. After they have sown the Seed well, and that it begins to rise or spring out of the Ground, they cover it every Morning with Branches of Trees, to defend it from the scorching Heat of the Sun, which would burn it up before it was ready to transplant. They make ready the Garden where they design to raise the *Tobacco*, by clearing, stubbing, cutting, and burning the Wood that is upon the Ground, and freeing it entirely from all Sorts of Weeds. When the Garden is ready, they remove the Plants in a rainy or wet Season, and plant them down again at about three Foot distance from each Plant to another every way, that it may have Room to spread, without the Leaves touching one another, so as to make them rot and corrupt. After the *Tobacco* is thus planted out, Care must be taken from Time to Time, to prevent the Weeds from over-powering it. When the Plant is ready to flower, they stop it short, by cutting it about Knee-high; then pull off the Leaves underneath that hang on the Ground, so that they leave behind about 10 or 12 Leaves upon a Stalk, which being weeded or howed diligently every seven or eight Days, all that Time clearing away all Weeds, the ten or twelve remaining Leaves will be prodigiously encreased, and become as thick as a good Skin. To know and try whether it be ripe, they rumple or fold a Leaf in their Fingers, if it break in touching, it is ready to cut: Being cut, they leave it spread

upon the Ground; after which they string it upon Cords, so that the Plants may not touch one another; and so they leave it to dry in the Air, fifteen Days or three Weeks: They then pull off the Leaves from the Stalks, and take out the middle Rib, and moistening them a little with Sea Water, twist them into a Sort of Rope, and afterwards roll them up together.

They make, by Distillation of *Tobacco* with Flegm of Vitriol, a Liquor that is emetick, or very vomitive, and proper to cure Itch and Scabs, by rubbing lightly with it. There is a black fetid Oil distill'd from it, by Means of a Retort, which is much of the same Nature. There is likewise a Salt made of it that is Sudorifick, to be given from four Grains to ten, in any convenient Liquor.

There are several other Sorts of Leaves, which we may sell if they come to Hand, as *Betel*, or *Tembul*, which are the Leaves of a creeping Plant, of which the *Indians* make a Kind of Troches with *Areca* and burnt Oyster-Shells, but this Leaf seldom is brought into *Europe*. The *Coca*, which is the Leaf of a small Shrub, pretty like the Myrtle, which the *West-Indians* use as the *East-Indians* do *Betel*, and the *Europeans Tobacco*. The Inhabitants of *Peru* use the Leaves of *Coca* two different Ways; the first, in making a Comfit of it with burnt Shells, to secure them from Hunger and Thirst in a Journey; the second, in mixing it with Leaves of *Tobacco*, which makes them as if drunk or mad, and sets them on a thousand Extravagancies.

The *Aleana*, or *Cyprus*, are the Leaves of a Plant which grows plentifully in *Egypt*, and the *Levant*, and which the *Indians* employ in painting their Nails and Hair yellow, infusing it in Water; and to paint red, putting it in Vinegar, Juice of Citron, Alum-Water, or any other Acids. The *Egyptians* make an Oil of the Berries of this Plant, which is call'd *Cyprus Oil*, very fragrant, and proper for relaxing and softning the Nerves. Several Persons have assur'd me, that the *Aleana*, or *Egyptian Cyprus*, is that which the Botanists call *Ligustrum Aegyptiacum*. There are several other Medicinal Herbs, which the Druggists do not deal in, because the Herbsellers furnish the Apothecaries with what they have Occasion for.

In Places where there are none of these Herbsellers, the Apothecaries have often a great deal of Trouble in sending to a great Distance for a small Quantity of any Herb they want, but they have the Advantage of knowing the Herbs much the better for it, and of using the right Plant, whereas the Herbsellers frequently sell one for another.

Besides

Besides these Herbs, we sell a great deal of a small Seed, of a deep red Colour, no bigger than a Pin's Head, which is found upon the Root of the large *Pimpernel*, which the Dyers use by the Name of Seed *Cochineal*, and sometimes Wood and wild *Cochineal*. This *Cochineal* should be chosen fresh, dry, large, high in the Colour, and the cleanest that can be got.

The Plants that come under the Catalogue of Drugs, are *Scordium*, Mountain *Calamint*, *Germander*, *Chamaepitys*, White *Hore-hound* or *Marrubium*, Southern-wood, the great and small *Wormwood*, *Cterach* or *Spleen-wort*, *Betony*, *Avena*, *Camomil*, *Periwinkle*, *Hemlock*, *Hart's-Tongue*, *Hound's-Tongue*, *Agrimony*, *Rupture-wort*, *St. John's Wort*, the great and lesser *Centaury*, *Melilot*, *Mugwort*, *Mint*, *Baum*, *Basilicum*, *Origanum*, *Savory*, *Hyssop*, *Scabious*, *Thyme*, and several other Herbs treated of so largely by all Botanists, that it will be unnecessary to say any Thing further. We do not sell these Herbs in the Druggists Shops, because of the Herb-sellers; but we sell the fix'd, essential, and volatile Salts, especially those of *Carduus*, *Wormwood*, *Mugwort*, *Centaury*, *Baum*, *Sage*, *Rosemary*, *Succory*, *Scurvy-grass*, *Benn*, and several other Sorts. But as to the Choice of these Salts, that honest People may not be cheated in the Purchase of them, which is too frequently done by the Chymist and Druggist, who instead of any of these Salts, give 'em either Salt-Peter, Salt of Tartar, or Sal-Polychrest, which they put into so many different Bottles, and write the Names of the several Salts upon them: Therefore, I say, to hinder them from being cheated, let 'em throw any of these Salts upon lighted Charcoal, and if they fly off, or sparkle in the Flame, it is certain they are mix'd with Salt-Peter; but it is not so easy to discover the Tartar, but only that this Salt is not so soft to the Touch, as these vegetable Salts.

Nicotiana, in English, *Tobacco*, is a *Lemery*. Plant whereof there are principally three Kinds, the first is call'd, by *C. Bauhinus* and *Tournefort*, *Nicotiana major latifolia*, the broad-leav'd *Tobacco*, and by *Parkinson*, *Tobacco latifolium*. There are a great many other Names more curious than instructive, which I shall pass by: This first Kind bears a Stem of about five or six Foot high, as thick as a Man's Thumb, round, hairy, full of white Pith; the Leaves are broad, and larger than those of *Enula Campana*, without Stalk, a little pointed, stringy, of a pale, green Colour, glutinous in touching, of a sharp burning Taste: Mr. *Tournefort* says, that the Top of the Stem is divided into several Sprigs, that sustain Flowers made like Bells, cut or separated into

five Parts, of a purple Colour; when the Flowers are gone, there is a husky, oblong Fruit succeeds, that is partition'd into two Cells, containing in them a good deal of small, reddish Seed: The Root is fibrous, and of a very biting Taste; the whole Plant is of a strong Smell.

The second Sort is call'd *Nicotiana major angustifolia*, the great Narrow-leav'd *Tobacco*, or *Hyoscyamus Peruvianus*; in Opposition to the first, call'd *Hyoscyamus latifolius Peruvianus*, the *Peruvian Henbane*. It differs only from the other, in that the Leaves are narrower, sharp-pointed, and hang to the Stem by longer Tails or Stalks.

The third Sort is call'd *Nicotiana minor*; the small *Tobacco*, by *Bauhinus*, *Tournefort*, and *Ray*, and by *Parkinson*, *Tobacco Anglicanum*, the *English Tobacco*. It bears a Stalk a Foot and Half, or two Foot high, round, hard, hairy, the Thickness of one's Finger, sometimes branchy, glutinous to the Touch, and carries its Leaves, rang'd alternately, oblong, thick, and of a brownish, green Colour, hanging upon short Stalks; the Flower, Fruit and Seed, are like the first Sort, but the Flowers more inclinable to a yellowish Purple; the Root about a Finger's Thickness, and sometimes divided into white Fibres, that spread themselves round in the Ground. *Tobacco* is cultivated in fat, rich Land in Gardens, and yields Abundance of a sharp, biting Salt, both fix'd and volatile.

It purges upwards and downwards, with a great deal of Violence, in the Apoplexy, Palsy, Lethargy, Suffocations of the Womb, and in the Asthma taken by the Mouth, or being fomented with it; applied outwardly to the Part, or smoak'd, it relieves the Tooth-ach; in Powder or Snuff it purgeth the Nostrils, and excites Sneezing, and is a very good vulnerary, the Leaf, Ointment, or Powder, being applied to the Wound.

[The *Tobacco* of the Shops is the Leaf of the *Nicotiana major latifolia*. C. B. P. 169. *Hyoscyamus Peruvianus*. Ger. 285. It is common in the Gardens of the Curious, and flowers in June; the Species call'd *English Tobacco*, is the *Priapeia quibusdam Nicotiana minor*. J. B. 3. 360. *Hyoscyamus luteus*. Ger. 284.

In Regard to the other Things mention'd in this Chapter, the *Betle* is the *Betula Codi Hort*. Mal. 7. 29. *Piper longum foliorum Nervis deus rentibus, tenuioribus et mollioribus Betle distum*. Hist. Ox. 3. 603. But as neither this, nor the others that follow it, ever come into the Druggists Shops, and the Herbs are Part of that Class of the *Materia Medica*, which is entirely in the Hands of the Sellers of Medicinal Herbs, I shall not trouble the Reader with a particular Account of them here.

For the *Coccus infectiorius*, here call'd *Seed Cochinial*, see the Chapter of *Cochineal*.]

15. Of Coral.

CORAL, according to Mr. Tournefort, is a Plant that grows at the Bottom of the Sea; it has no Leaf, nor is yet known to have Flower nor Seed; nevertheless it sticks to the Rocks by a Kind of Root, and is cover'd with a Bark that is adorn'd with Pores like Stars, nearest to the Bottom; it is divided into Branches, and discovers Rays that have some Analogy to Fibres: In short, it is undoubtedly encreased by its Seed, which is the Opinion countenanced by all those that rank Coral among the Number of Plants. It is agreed, at this Day, that it is hard in the Sea; the Softness of the Bark or Crust, which is smooth, and almost oily, has, perhaps, deceiv'd those who have asserted that this Plant was soft. The Bark is a cartilaginous Crust, red upon the red Coral, and white upon the white. The Extremities, or Ends of the Branches, are soft, and also produce little Balls, the Size of a red Gooseberry, divided commonly into six Cells, fill'd with a white Humour like Milk, like that of the Tithymale; it is fat, cold, and astringent. These little Balls are commonly call'd Flowers of Coral, but ought, with more Reason, to be nam'd the *Capsula* of the fluid Plant: For our modern Authors have observ'd, that the white Juice which they yield produces the Coral Plants on any Bodies upon which it falls; and besides the Coral they shew at *Pisa*, which sticks naturally upon a human Skull, I have a pretty large Piece that grew upon a broken Piece of Earthen-ware.

There are properly but three Sorts of Coral used in Physick, namely, the red, the common white Coral, which has some Resemblance to the red or flesh Colour, ought to be judg'd a Species of this; the true white Coral, which differs not from the red but in Colour; this is the least and dearest: In its Place they use commonly that Sort for the white, which *J. Bauhinus* calls *Corallium Album Officinarium*, *Oculinum*, the white Coral of the Shops, that is full of Eyes. The black Coral, called *Antipathes*, of no Use at all: It seems indeed of a different Nature from all the others.

They fish for Coral in the *Mediterranean*, on the Coast of *Provence*, near *Toulon*, or *Cape Creuse*, between *Calvary* and *Bona*, upon the Coast of *Catalonia*, in the *Strait* which are betwixt *Sicily* and *Italy*, towards the *Bastion of France*, and in some other Parts; as on the Coast of *Sardinia*, and those of the Isles of *Corfica*

and *Majorca*. The Coral-Fishing, according to Mr. *Tavernier*, is from the Beginning of *April* to the End of *July*, in which they usually employ two hundred Barks, some Years more, and some Years less.

As the Coral grows in the hollow Rocks where the Sea is deep, this is the Artifice they use to get it up. The Coral-Fishers lay two Beams of Wood across, and hang a good Piece of Lead in the middle, to sink them; then they tie Tufts of Hemp about the Beams, which are slightly or carelessly twisted about the Thickness of one's Thumb, and tie the Beams with two Cords; the one to hang at the Prow, and the other at the Stern of the Bark; so that the Pieces of Wood are left at the Bottom to run along the Rocks, and catch about the Coral in their Passage: It is necessary, sometimes, to make Use of five or six Boats to get up the Beams; and during that Time, if one of the Cables happen to break, they are all in Danger of being lost; there is a great Risk in the taking the Coral out, that sometimes does not fall into the Sea; and the Bottom being usually full of Mud, the Coral is apt to be destroy'd as the Fruits of the Earth by Worms; so that the sooner the Coral is got from the Filth of the Sea, the less it is damag'd.

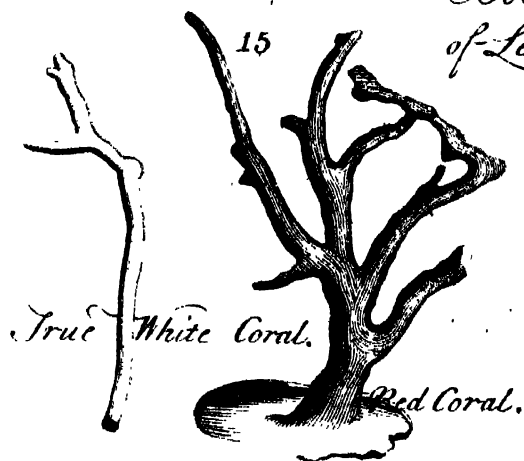
Of all the Corals the red is most in Use, as well for Medicine as other Things; and People that value Coral, the *Japanese*, and other Nations, most esteem the red Coral; which to be in its Perfection ought to be thick, shining, in fine Branches, and of a beautiful red; the little Pieces, and such as are cover'd with a crusty Matter, ought to be rejected; nevertheless, when that is reduced to Powder, it is every whit as efficacious as the finer. By Means of certain Acids, they make a Tincture of red Coral, which is afterwards reduced to a Syrup, which is reckon'd an admirable Cordial, and useful to purify and cleanse the Mass of Blood. There is likewise a Magistery, and Salt, made of this; but the most common Way of using it is, reduced to an impalpable Powder, by levigating it upon a Marble with Rose-Water, &c.

16. Of Black Coral.

AS to the black Coral, the true Kind is so rare, that it is almost impossible to meet with it; for all that we now have, is only a Sort of Plant that is petrified in the Water, which some have call'd *Antipathes*, but it is entirely different from the true Coral, being very light, and more like Horn than Coral; whereas the true Sort is heavy, of a reddish black Colour, and very rough; with the utmost Diligence I

have

Book 5.
of Leaves.



True White Coral.

Red Coral.

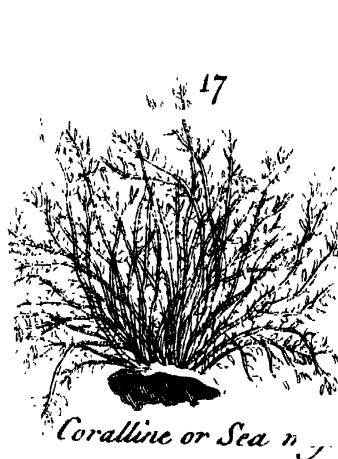


Indigo



Ordinary White Coral.

True Black Coral.



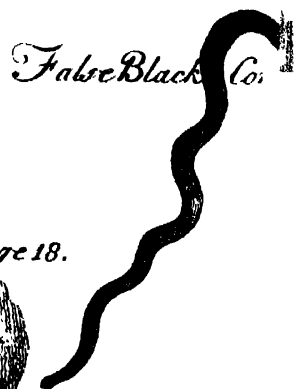
Coralline or Sea urchin.



Coral des.



Sponge 18.



False Black Coral.

have only been able to meet with one Piece of this, and that no bigger than the End of one's Finger; tho' I have a Piece of the common black Coral, of about two Foot long. As to the *Coralloides*, it is nothing else but white Coral that is not brought to its Perfection; and is of no Manner of Use; yet it is sometimes sold instead of the White, tho' it is easy to distinguish, it being large, light, and imperfectly form'd.

17. Of Coralline, or Sea-Moss.

THE Coralline, or Sea-Moss, is gather'd from Rocks, or Shells, in the Sea, to which it grows; there are several Sorts of it to be met withal; but that which is us'd in Physick comes from the *Bastion of France*, and other Parts of the *Mediterranean*. *C. Baubinus* calls it, *Muscus Maritimus*, *sive corallina Officinarum*.

This Moss or Coralline, is of some small Account in Medicine, as it is said to have a Quality to destroy Worms: As to the Choice, it ought to be greenish, smelling and tasting of Sea Water, and the most free of Dirt and Filth that can be got.

Corallium, Lithodendrum, or Coral, *Lemery*. is a stony Plant, that is found growing to Rocks, at the Bottom of the Sea, and crusted over in the Nature of Stone. The chief of what is sold comes from several Parts of the *Mediterranean*. There are three Sorts of it, and, white, and black.

The *Corallium Rubrum*, or red Coral of *C. Baubinus*, grows commonly three or four Fingers high, but such Corals as are found of any considerable Length, are kept in the Cabinets of the curious; it bears several Branches without Leaves, that are very hard, smooth, shining, and of a fine red; the Root is rocky, and of the same Hardness: This Coral is the most us'd and esteem'd in Physick; chuse such as is all of a Piece, polish'd, shining, and of the highest Colour.

The second Sort is white Coral that grows much about the same Height. There are two Kinds of this, one call'd *Corallium Album*, *Oculatum*, which is a little stony Plant as the former, the Ends of whose Branches are round, and represent, in a Manner, little Eyes. The other is call'd *Corallium Asperum*, the rugged Coral; this is a little strong Shrub, about a Hand high, that is ramose, rough, white, full of Pores, or little Holes, and much lighter than the former; this last grows not only in the *Mediterranean* but in the red Sea, and is of small Account in Physick.

The third Kind of Coral is call'd by *C. Baubinus*, *Corallium extra rubens intus nigrum*, or red Coral without and black within, but this is very scarce; and there is substituted in its Stead a false black Coral, call'd *Antipathes*, which is a stony Sea-Plant, which is usually cover'd in the Sea with a Sort of Bark or tartarous Crust, of the same Colour. When the Corals are young and tender, the Ends of their Branches are found divided into little Balls, of the Size of a small Gooseberry, that are soft, and distinguish'd usually into six little Cells, full of a milky Liquor, that is of an acrid styptick Taste, and these are call'd Coral Flowers.

Others say, but improperly, that Coral, while under Water, is green and soft, but when it once comes into the open Air, it changeth both its Colour and its Nature, and from its Greenness becomes of a very delightful beautiful Red, and from its Softness, of a compacted Firmness, that is hard and durable. It springs up naturally, resembling a Plant or Shrub, adorn'd with many pretty Branches. The red is best, and of that the reddest, the palest being of less Use; but in Medicines a small Sprig Sort is taken for Cheapness. The white is next in Goodness; the best of which is that which is pure, white, and clear, almost transparent, free from Dross, and something resembling white Wax. The black is not valued, yet the greatest Rarity of them all. It is observable, that red Coral, infused two or three Days in white Wax, melted upon hot Embers, and pour'd an Inch over it, loses its Colour, and the Wax becomes yellow. Fresh red Coral put into the same Wax, in the same Manner, becomes brown; and fresh red Coral put in like Manner into the same Wax the third Time, makes the Wax become red; for the Wax dissolves, and draws forth Part of the red sulphureous Particles lying on the Surface of the Coral.

Coral is prepar'd by levigating it on a Marble into a fine subtile Powder. It is cooling, drying, and astringent, strengthens the Heart, Stomach and Liver, absorbs Acidities, purifies the Blood, resists the Plague, and the Force of putrid and malignant Fevers; stops Fluxes of the Belly, and is profitable in the Gonorrhœa and Whites. It is said to prevent the Epilepsy in Children, being first given in the Mother's Milk as soon as the Child is born. It stops bleeding, helps in Difficulty of Urine, and is prevalent against the Stone in the Bladder, and the bloody Flux. Dose from a Scruple to a Dram, in any proper Liquor. Outwardly it helps Ulcers, filling them with Flesh, and cicatrizing; in Collyries it helps the Eye-Sight, stops the Weeping of the Eyes, and absorbs the watry sharp Humours.

Of this there is a Tincture made with Spirit of Vinegar, or Juice of Lemons, and from thence a Syrup, Magistery, and Salt prepar'd; but they are all forced unnatural Preparations. And crude Coral, reduced to such an impalpable Powder, as aforesaid, is far superior to all the other Preparations of it.

Corallina, call'd Coralline, or hard Sea-Moss, is of several Kinds. That which we now use in Physick, is call'd *Muscus Marinus*, *frus Corallina Officinatum*, Sea-Moss, or the Coralline of the Shops. This is a little bushy Plant, which grows about three Fingers high, bearing a great many little Stalks, that are as fine and slender as a Hair, stony, and furnish'd with very little Leaves, of an ash-colour'd green, and a fishy Smell, the Taste being salt and disagreeable, cracking or crackling betwixt the Teeth like small Stones, and being subject easily to be bruised betwixt the Fingers. Chuse such as is whole, clear, of a whitish green Colour, and very strong Smell. It yields a good deal of Salt and Oil. It is proper to kill Worms, suppress Vapours, provoke Womens Courses, and stop Fluxes of the Belly. Dose, in fine Powder, from half a Dram to a Dram.

The *Coralloides* is a Plant that is but petrified in Part, having the Appearance of a little Shrub, but without Leaves. There are several Sorts of it, which vary in Size, Shape, Hardness, and Colour. They are all usually astringent as to Passage by Stool, and aperitive by Urine, but of no great Vogue in Physick. It is call'd *Coralloides*, as being something like Coral in Figure and Hardness.

Other Authors describe the Coralline to be a hard stony Moss, growing usually on Rocks, in or near the Sea, rising either from the Stones thereof, or from the Shells of Scallops, Oysters, and the like. It grows scarce a Hand high, spreading forth several small Branches, like a green Herb, with many small short Leaves like Hairs. It is gather'd on all the Western Coasts, and the Northern Parts of Europe, and is found growing in little white Threads, fasten'd to the Rock or Shell it springs from, as Moss to a Tree; and if good, is very white, in little Strings, like the Unravelling of coarse Linnen Cloth, some an Inch long, some shorter, some longer, of an unpleasant Taste and Smell.

[The red Coral is the *Corallium rubrum majus*. Park. 1299. *Corallium verum*. Boet. 318. the White the *Corallium album majus*. Park. 1300. *Corallium album*. Tourn. Inst. 527. and the Black the *Corallium nigrum*. C. B. Pin. 366. *Keratophyllum arborum nigrum*. Boerh. Ind. Alt. 6. *Lithophyton nigrum arborum*. Tourn.

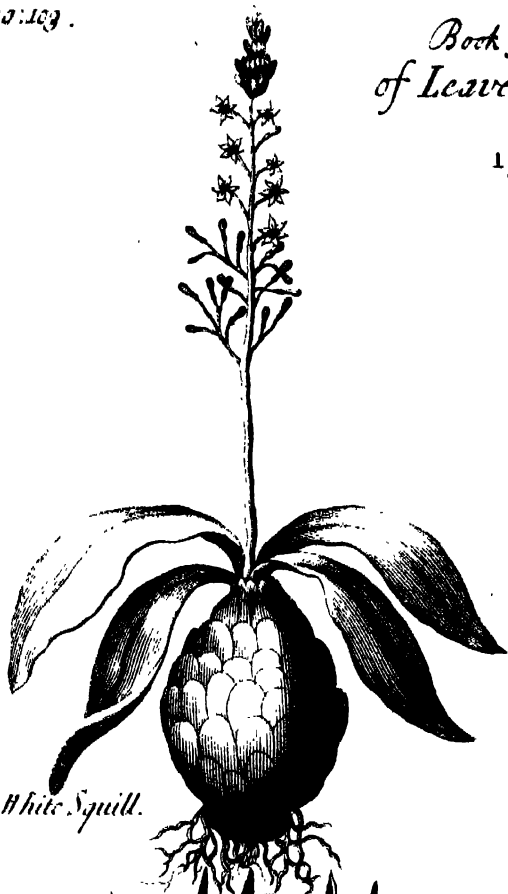
Inst. 574. The Red is taken out of the *Mediterranean*, the White mostly out of the *Sicilian*, and the Black out of the *American Seas*; the Red is used in Medicine very much; but all its Preparations, except that of lœvigating it into an impalpable Powder, are now entirely out of Use.]

18. Of Sponges.

Sponges are a Kind of *Fungus*, or *Sea Mushroom*, which are found *Pomet*. sticking to the Rocks in the Sea. I shall not detain the Reader to give an Account of what a Multitude of Authors have said concerning Sponges; some saying that they are Male and Female, others that they are neither Plants nor Animals, but both, that is *Zoophytes*, which partake of the animal Kind, and that of Plants too. There are two Sorts of Sponges sold, namely, the fine, which are those the Antients call'd the Male; and the coarse which are the Female. The greatest Part of the Sponges that are sold comes from the *Mediterranean*, and there is a certain Island of *Asia*, that furnishes us with a very large Quantity of Sponges. This Isle is call'd *Icarus*, or *Nicar*, where the young Men are not allow'd to marry, 'till they shew that they can gather Sponges from the Bottom of the Sea; and for this Reason, when any one would marry his Daughter, a Number of young Fellows are stripp'd and jump into the Sea; and he that can stay longest in the Water, and gather the most Sponges, marries the Maid. The People of this Island pay a Tribute to the Grand Signior in Sponges.

The finer the Sponges are, the more they are esteem'd, and those are reckon'd best that are fairest, clearest and lightest, whereof the Holes are small, and the least full of Stones, that may be; as to the coarse Sort, the nearer they approach to the fine, the more they are valued.

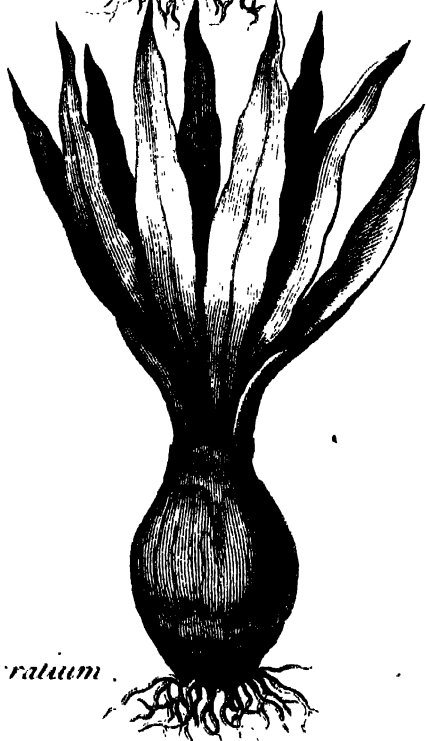
The Use of Sponges is so well known, it would be unnecessary to give any Description thereof; after they are prepar'd, by cutting into sizeable Pieces, and put into melted, white Wax, and afterwards pressed, they are sold to Surgeons, and other People, by the Name of prepar'd Sponges. They are used to dilate the Orifices of Wounds: They are likewise calcin'd to make a Powder for the Teeth: The large or coarse Sponges have a Sort of little Pebbles, and other extraneous Bodies in them; to which, when reduced to Powder by Calcination, they assign a Property of curing the Gravel: Some Authors call these Stones by the Name of *Cybalithos*, and affirm that such of 'em as are to be found in Shape of an Almond, being



The White Squill.



The Red Squill.



Pancratium.



Pot-ashes or Kali.

being pounded and mix'd in any proper Vehicle, are useful to destroy Worms in Children.

The *Sponge* is a Kind of Mushroom *Lemery.* which grows to the Rocks in the Sea, of which there are two Kinds, [as *Pomet* has describ'd them already.] But though it is taken from the Sea, Authors have not yet determin'd in what Class to place it; some thinking it to be neither Vegetable, Mineral, nor Animal; others, that it participates of them all: Some again place it between Animals and Vegetables, and that it partakes of both of them, for that it has an active Quality to dilate itself, and shrink up together, when in the Sea, and therefore they will have it to be a Plant Animal; because in its Nature it comes near both to that of an Animal and also to that of a Plant.

The most Part of Sponges that we use are brought from *Syenna*, *Aleppo*, and other Places in the *Levant*. Those which are fine, smooth, soft, and not too full of large Holes in them, are said to grow in the *Archipelago*. Those which are large, fine, close, and lively colour'd, whether white or yellow, are accounted the best. The worst Sort are of a dirty Colour, rugged on the Surface and hard, with small gritty Stones sometimes in them. The Sponge is of an alkaline Nature, and is good against Pains of the Stomach, Gripings in the Bowels, and the Cholick; and is suppos'd to be a Specifick against the Stone and Gravel in the Kidneys or Bladder, or any Obstructions in the Urinary Passages. The chief Use of it is in a Powder calcined.

The Sponge-Stone is found in those Places where Sponges are found, and is made of the Matter of Sponges petrified or harden'd. *Schroder* saith, that it also grows in Sponges, and is a brittle Stone, white or grey. It is attenuating without much Heat, and is good to break the Stone in the Kidneys and Bladder; and to discuss Tumours of the King's-Evil, being drunk every Morning in Urine, or in Wine, with *Sal Gem* and *Tartar*. The levigated Powder absorbs Acids, destroys the Matter breeding the Stone and Gout, cures Heart-burnings, and violent Pains in the Stomach.

[The Sponge used in Medicine is the *Spongia Globosa*, C. B. Pin. 368. *Spongia marina alba*, Ger. t. 383. *Spongia marina vesicalis*, Park. 1303. It is found growing to Rocks, Shells, and other Substances, in the Sea.

The Sponge Stone is the *Lapis Spongiae*, Boet. 407. *Lapis in Spongiis*, Mathiol. 1390. *Spongitis*, Aldrov. Met. Metall. 671. It is a porous, brittle Stone, of a pale greyish Colour, found in and about the larger Pieces of Sponge, but never used now in Medicine.]

19. Of Squills.

SQUILLS are Sea Onions, which are brought from *Spain*, &c. where *Pomet.* they grow plentifully, especially on the Sea Shore; great Quantities also come from *Normandy*, especially about *Rouen*. They are of different Sizes and Colours; but those we commonly have are the red *Squills*, which the Antients call'd the Female. The white were known by the Name of the Male *Squill*; but we meet with very few of them. These Onions bear broad, large, long, green Leaves, and Flowers, like Stars, of a fine white Colour.

Chuse such Roots, or Bulbs, as are found, heavy, fresh, and full of Juice, and beware of those that are decay'd towards the Head, to which they are subject. They are made Use of in the Shops for making *Vinegar* and *Oxymel* of *Squills*, and *Troches* for *Treacle*; and likewise in some Ointments and Emplasters. Several Persons have assur'd me, that the *Squills* which we have from *Normandy*, are those that the *Botanists* call *Pancreatum*.

The *Squills* are reckon'd, especially the Heart, to be Poison; for which Reason they split them in two, throw away the dry Leaves, and the Heart; and the middle Part betwixt both, they expose to the Air to dry, and being thus prepar'd, they make Use of it, as aforesaid, to make *Vinegar*, *Honey*, *Wine*, &c.

Scilla, or the *Squill*, is a kind of *Ornithogalum*, or a Plant, whereof *Lemery.* there are two Sorts. The first is the *Scilla major*, or *Scilla rubra magna vulgaris*, the great, common, red *Squill*, call'd by *Tournefort*, *Ornithogalum maritimum*, *scu*, *Scilla radice rubra*, the Sea Onion, for red-rooted *Squill*; and by *Parkinson*, the true *Pancreatum*. It bears Leaves of above a Foot long, almost as broad as a Man's Hand, fleshy, very green, full of a bitter viscid Juice; From the Middle rises an upright Stalk, of about a Foot and a Half high, bearing on the Top, Flowers compos'd of six white Leaves, that are form'd round; which, when gone, are succeeded by a Sort of roundish Fruit, rais'd with three Corners, and divided within into three Partitions, which are fill'd with black Seed. The Root is an Onion or Bulb as big as a Child's Head, compos'd of thick Coats or Spheres that are red, juicy, viscid, and encompassing one another, having at the Bottom several thick Fibres.

The second Sort is call'd *Scilla mascula*, the Male *Squill*, or *Scilla minor*, *scu* *Scilla radice alba*, the lesser *Squill*, or that with the white Root. It varies from the former, in that the Roots and

Leaves are not so large; besides, this is white, and less common. Both Sorts grow in sandy Places, near the Sea, in *Spain, Portugal, Sicily, and Normandy*. We have them brought to us of all Sizes. They contain a great deal of essential Salt, some Oil and Flegm, and a little Earth.

They are hot and dry, sharp, bitter, attenuating, inciding, absterging, discussing, alexipharmick and diuretick; powerfully cleanse the Stomach, open Obstructions of the Liver, Spleen, Gall, Mesentery; provoke Urine and the Terms, carry off slimy tartarous Matter from the Lungs; for which Reason they are accounted good against Colds, Coughs, Wheezings, Hoarseness, Difficulty of Breathing, and are singular against the Scurvy, Gout, and Rheumatism. The Root is prepar'd by rolling it in Dough, or putting it in Pye-crust, and baking it in an Oven, then taking it out and drying it. Being thus prepar'd, it is fit to make Vinegar of *Squills*, by infusing it in Vinegar. Dose from one to four Spoonfuls: Or Wine of *Squills*, by infusing it in Wine; which is emetick, and good against Asthma's, Phthisicks, Falling-Sickness, &c. given from an Ounce to two, or more. There are several other Preparations of the Root to be met with in every Dispensatory, especially *Quercetan's, Swelfer's, the Augustan and London Dispensatories*.

[The *Squills* generally used are red, which are the Roots of the *Scilla vulgaris radice rubra*, C. B. Pin. 73. *Scilla rubra sive Paneratum verum*, Park. Parad. 133. It grows on the Sea Shores, and flowers in September.

The White, which is not so common, but sometimes brought among the other, and used indifferently with it, is the Root of the *Scilla Hispanica vulgaris*, Ger. Em. 171. *Scilla magna alba*, J. B. 2. 618.

A few Grains of Cinnamon in Powder takes off the emetick Quality of this Root, and makes it a powerful Diuretick, and an excellent Medicine in Dropsies.]

2 o. Of Pot Ashes, Kelp, or Kali.

Pomet. THIS is a grey Salt, which we bring from *Alicant* and *Carthagea* in *Spain*, in Loaves or Cakes of different Sizes. It is made from a Plant that grows along the Sea Coast, which the *Botanists* call *Kali*, and we *Salt-wort, Soap-wort, Glass-weed, Kelp*, and many other Names. This Plant bears a Stalk a Foot and a Half high, or thereabouts, furnish'd with small narrow Leaves. They sow this Herb, and when it is come to a due Height, they cut and manage it like Hay.

When it is dry'd, the *Spaniards* make large

Holes or Pits in the Ground, in the Nature of Lime Kilns, into which they throw a Bundle of the dry'd Herb, to which they put Fire; and when it is well lighted, they throw in other Bundles, 'till they fill it full of the dried Herb; when they have fill'd it, they stop it up, and leave it all together for some Time, that it may not only be reduced the better to Ashes, but likewise incorporate, and be capable to form into a Stone or Cake, in which Form it is now brought to Market; when they have open'd the Pit, they find the said Herb burnt into a hard Stone, which they are oblig'd to break and raise up just as they do Stone out of the Quarry.

We sell at *Paris* four Sorts of *Pot-Ashes*; the first and most valuable of which are those of *Alicant*, which, when they are right, ought to be dry and clean, of a bluish grey without and within, having little Holes made like a Partridge's Eye, and when spit upon and held to the Nose, have no offensive Smell. And beware the Stones be not enclosed with a greenish Crust, or full of Pebbles; for the first will stain and spot and entirely spoil Linen, and the second, by encreasing the Weight, will enhance the Price, besides spotting the Linen, according to the Nature of the Stones that are found within. Likewise take heed that the Bales be not open'd, and the Commodity that was good exchanged for that which is naught, and chuse such as is in small Pieces. This is very much used by the Glass-makers, to make the best Glass, and the Soap-boilers likewise use it considerably, drawing its Salt from it, which they use in the making of white and marbled Soap; but the greatest Part of that which comes from *Spain* is consum'd at *Paris* and the neighbouring Villages by the Scourers or Whiteners, who use it to whiten their Linen.

They make from this Salt, which the *French* call *Soude*, by the Assistance of common Water, a white Salt, call'd Salt of *Kali*, or *Alkali*, which is as much as to say, *Soude* Salt, because *Al* is an *Arabian* Word that signifies Salt, and *Kali*, *Soude*. It is to be observ'd, that this Salt only is properly call'd *Alkali Salt*; though the fixed Salts of other Plants may be also call'd *Alkali Salts*, with the Addition of the Name of the Plant they are made from, as the *Alkali Salt* of Wormwood. There are those who pretend that the true *Alkali Salt*, is the Glass Salt, but they deceive themselves, as they may be satisfied in the Chapter concerning the Glass Salt.

The second Sort is that of *Carthagea*, which only differs from that of *Alicant* in not being so good, neither is it of the bluish Cast, but more crusted, and the Bales are much larger. The third Sort of *Pot-Ashes* is that named the *Bourde* Kind, which

which ought to be entirely rejected, as being so bad, that it is fit for nothing but to deceive those that buy it. This is usually moist, of a blackish green Colour and very foetid. The fourth Sort is that of *Cerberus*, which is made of an Herb found along the Sea-Coasts of *Normandy*. This is likewise a very bad Kind, being extremely humid, of the same Colour and Smell with the last Sort, and fill'd with Stones. These two Sorts are good for nothing but to impose upon the unwary Buyer, and cheat the poor Whitensers.

21. Of Sandiver, or Glass Salt.

THE *Glass Salt*, which the Workmen call *Sandiver*, or the Scum of Glass, is a fat Dross that floats upon the Glass Metal when it is in Fusion. And this Froth comes from nothing but the Pot-Ashes, which they use in making their Glass; for the Flints that they make use of will afford no such Scum.

Chuse such *Sandiver* as is in very large Pieces, white without and within, heavy, and the like Marble that can be; and throw away such as is fat, blackish, and moist. It is very much used by those who make white Earthen Ware, because it assists the Sand in its Vitrification. It is very remarkable that this should be of no Use to the Glass-makers; and the Earthen Ware Workers would not know what to do without it.

It is to be had in all Places wherever Glass is made, it being a sort of superabundant Salt, thrown forth from the Metal while melting in the Furnace, and by the Glass-Men taken off, as the Recrement of their Materials, with a Ladle. It is a very white Salt, and inclining nearest to a nitrous Taste, easily dissolving in the Air, or any moist Place; for as Glass is made of Sand and Pot-Ashes, the latter being put in to make the former melt into Metal; so this *Sandiver* is the Superabundancy of that Salt, more than is requisite to go into the Body of the Glass, which being in Fusion, sends up to the Top whatever is more than requisite for that Purpose. This must be scumm'd off, or else 'twill make the Glass unfit for working, very brittle, and no ways pliable.

The best Metal will yield, in a Pot of two hundred Weight, a quarter or half a hundred of *Sandiver*. The weaker the Salt or Ashes are, the greater is the Quantity of *Sandiver*: They yield some four or five Parts more than others do. When the Ashes are bad, they are forced to fill the Pot four or five Times with more fresh Ashes, by reason of the Quantity of *Sandiver* that is in them, before the Pot will be fill'd with Metal. They dare not cast in any cold Water to hinder

the Boiling; for if they should, the Furnace and the Pots would be blown up together.

This *Sandiver* serves to make Metals run; and a little thereof put into *Antimony* and *Salt-Petre*, for making *Crocus Metallorum*, encreaseth the Quantity of the *Crocus*, and it will therewith separate the better from the *Scoria*.

'Tis sold in *France*, and there used to powder their Meat, and also to eat instead of common Salt. Dissolv'd in Water, and pour'd upon Garden Walks, it destroys both Weeds and Vermin. The more nitrous and fossile the Salts are, the more Unctuousity they have, and the more they run into *Sandiver*; to which Nitre comes somewhat near in Colour, Taste and Fatness.

It is said wonderfully to dry and heal Scabs and Manginess, the diseased Part being bathed with Water, in which it is dissolv'd. *Parkinson* says that *Sandiver* works much the same Effect with the Ashes of *Kali*, or Pot-Ashes; and is used often, being ground fine, either to be blown into Horses Eyes, or, being dissolv'd, squirted into them with a Syringe, to take away any Skin, Film, Cloud, or Pearl, growing on the Sight. It is also used to dry up running Sores and Scabs, Totters, Ring-Worms, and such like Blemishes of the Skin.

22. Of Crystal-Glass, and many other Sorts, with the various Ways of Colouring them, &c. from Pomet, Lemery, and several other Authors.

GLASS is a Composition, or Mixture of Ashes, or some Alkalifate Salt, with Sand, Crystal, Flints, Pebbles, or other Stones, melted together into one Body, by the Force of Fire. The first Ingredient going into the Composition of Glass, is Pot-Ashes, called by the *French*, *Soude*, & *Roquette*; and by the *Italians*, *Polverina Barillia*, &c. There is little or no Difference in the Goodness of these Pot-Ashes, but as to the several Places they are brought from; for the best Ashes make the most Salt, and the clearest and finest Glass. Pot-Ashes made of *Kali*, which comes from the *Levant*, make a far whiter Salt than the *Barillia*, and by Consequence a more perfect and beautiful Crystal.

Some use Brass Boilers in making this Salt, which may do, where green or blue Colours are to be made; for this strong Lye will fret off some Part of the Metal or Verdegreafe, which will damage a Crystalline Glass: In this Case therefore, the better Way is to have the Copper, or Vessel, doubly lin'd with Tin, because that emits no Tincture: Also, in making the aforesaid Salt, you must

must mix a Quantity, more or less, of Tartar calcin'd to Whiteness, with your Pot-Ashes; because it makes not only more, and a whiter Salt, and a more beautiful Crystal, but likewise opens the Body of the Pot-Ashes, causes a speedier Dissolution, and a better Extraction of the Salt, just as Alum or Vitriol opens the Body of Salt-Petre, in making *Aqua Fortis*, or Spirit of Nitre, which otherwise, without such Addition, would not rise so easily.

The second Ingredient that enters into the Composition of Glass, is Glass Stone, or Sand; and this is what gives Body, Consistency and Firmness to Glass, as Iron gives to *English* Vitriol, and Copper to *Hungarian*, *Dantzick*, and *Roman* Vitriol, which otherwise would run into Water, in moist Places and Seasons. Glass Stones are properly all, or most Sorts of Stones, which will strike Fire with a Steel; these are apt to vitrify, and easy to make Glass and Crystal withal; those which will not strike Fire with a Steel will never vitrify, whereby you may partly know the Stones which will, and which will not, be transmuted into a glassy Body.

The first Place is given those Stones which are white, but not transparent, of which Kind is *Tarso*, which is a Sort of hard White Marble, found in *Tuscany*, at *Pisa*, *Seravezza*, *Carara*, the River *Arno*, above and below *Florence*, and in many other Places in the World; that is the best which is without blackish or yellowish Veins in it like Rust. The next to a Kind of Pebble, in Appearance like White Marble, something transparent, and hard as a Flint, which being struck, gives Fire, and turns not into Lime: This, when first put into the Fire, becomes white, and loses its Transparency, and afterwards it turns to Glass.

Where fit Stones cannot be had, Sand is made Use of; and as some think, and affirm with good Reason, was the first Material made use of in making Glass; it must be small, white, and very clean, and well washed, before it be used, which is all the Preparation of it. This is usually met withal upon the Mouths and Banks of Rivers, and in many Places upon the Sea Shore, and sometimes upon Inland Sand-Hills. White Crystal Glass requires a fine, clear, transparent Sand, but green Glasses a more coarse and brown.

The last Ingredient is *Manganese*, or *Magnesia*, so call'd from its Likeness in Colour, Weight and Substance to the Lead-Stone, and it is accounted one of the Kinds thereof; it is found in *Germany*, *Italy*, *Piedmont*, &c. and of late Years, in *England*, among the Lead Mines; and wherever the Miners find it, they certainly conclude that Lead-Ore lies under it. The Potters spend great Quan-

ties of it, this being the only Material wherewith they colour their Black, as they do Blue with Zaffer. That is best which has no glittering Sparkles in it, and is of a blackish Colour; but being powder'd, of a dark Lead Colour: 'Tis a Stone very hard and ponderous, and the deeper its Colour is, the deeper it colours the Metal in the Furnace; this is to be put into the Melting-Pot together with the *Fritt*. This is the most universal Material used in making of Glass; and is that which alone purges off the greenish, bluish Colour which is in all Glass, and makes it not only clear and diaphanous, but also makes it dark, black, red, and purple, according to the Proportion which is added. The *Manganese* of *Piedmont*, and that of *England*, which are the best of all others, leave the Glass white, and take away from it the Greenness and Blueness; the Reason of which Operation seems to be a Change in the Figure, and more minute Parts of the Metal; for the Fire making the *Manganese* run, mixes it with the smallest Atoms of the Metal throughout, which by boiling and various Agitations and Revolutions of them, form those Reflexions of Light, which we call white, clear, and diaphanous.

As much *Manganese* prepar'd must be used in common white Glass, as in that made of Flint, or Crystal; the Quantity of the *Manganese* is uncertain, and is only known by Practice and long Trial, and therefore cannot be positively determin'd, either by Weight or Measure, but must be wholly left to the Eye, Judgment, Trial and Experience of the Artist. In putting of it in, you are to try whether it has enough of *Manganese*, or no; if it be greenish, give it more *Manganese*, with Discretion, and put it in by little and little; for otherwise, instead of a clear, white, diaphanous Colour, which in just Proportion it always gives, if too much be added it will make a dusky Purple, or Black, and take away the Splendor of the Metal, which otherwise would be clear and shining; for it is the Property of *Manganese*, to take away the Foulness and Greasiness which Crystal has, and to make it resplendent, white and clear.

A fourth Ingredient also has of late been added to the Composition of Glass, which is Salt of Tartar: If the Proportion of twelve Pound of pure Salt of Tartar be added to a hundred Weight of *Fritt*, it makes it, without any Comparison, much fairer and more pliable to work than ordinary. This Salt of Tartar must be very pure, and put in when the *Fritt* is made, mix'd with the Glass Stone, *Tarso* or Sand, together with the *Pulverine*, *Roquette*, or *Pot-Ashes* sifted and made fine, whereof the *Fritt* is to be made. Hitherto of the Materials; but to descend to the Instru-

Instruments, and the Manner of working in the Glass, would be beyond the Scope and Intention of this Performance, therefore I shall proceed to shew how to turn the Materials into *Fritt*, of which Glass is made and fashion'd.

Fritt is nothing else but a Calcination of those Materials which make Glass; and tho' they may be melted, and make Glass without Calcination, yet this would require Length of Time, and occasion much Weariness, and therefore this Calcination was invented to calcine the *Fritt* in the *Calcar*; which when it is calcin'd, and the Proportion of the Materials is adjusted to the Goodness of the *Pot-Ashes*, it presently melts in the Pot, and admirably clarifies. *Fritt* seems to be deriv'd from *frittare*, to fry; since, indeed, it is nothing else but Salt or Ashes mix'd with Sand, or Stone, in fine Powder, and so fry'd or bak'd together; the *English* call the whole Quantity, bak'd at a Time in the *Calcar*, a *Batch*: Then it runs into little Lumps like *Fritters*, call'd often in *Italian*, *Fritelle*, or little *Fritts*.

It is of three Sorts; first, *Grun-Glass Fritt*, made of common Ashes, without any Preparation of them, other than beating them to Powder, and a hard Sand fetch'd from *Woolwich* in *Kent*. Secondly, Ordinary *White Fritt*, made of Ashes of *Polverine*, or *Barrillia*, without extracting the Salt from them, which makes common White Glass. Thirdly, *Crystal Fritt*, made with *Polverine*, or *Pot-Ashes*, and Salt of Tartar, with white Crystalline Sand, Crystal, Pebbles or Flints. The Materials must be finely powder'd, wash'd, searfed, and then incorporated well together, which put into the *Calcar*, will exactly mix in the smallest Particles, and minutest Atoms; for otherwise the Salt and Sand will, in the Melting-Pot, easily separate one from another, which they are apt enough to do were they not stirr'd with the Rake.

To make the second Kind, or common white Sort of *Fritt* for the White Glass; searfe the pure *Pot-Ashes*, and what will not go thorough, beat and searfe again; beat also finely and searfe your *Tarso*, *Crystal*, &c. Take of the Ashes, &c. one hundred Weight, of the Stone from eighty to ninety; pure white Crystalline Sand, wash'd and freed from all its Filth, six Pounds; mix all together, then put them into the *Calcar*, or calcining Furnace, when it is hot; at first mix and spread them well in the *Calcar*, with a Rake, that they may be well calcin'd, and continue this 'till they begin to run into Lumps; the *Fritt* will be perfectly wrought in five or six Hours, being stirr'd all the Time, and a sufficient Fire continued; when you wou'd see whether it be enough or no, take a little of it out; if it be white,

yellowish and light, 'tis enough: The calcining it more than five or six Hours is not amiss; for by how much the more it is calcin'd, by so much the better it is, and the sooner it melts in the Pot; and by standing a little longer in the *Calcar*, it loses the Yellowness and Foulness, which it wou'd communicate to the Glass, and becomes more clear and purified.

It is here to be noted, that in *Italy*, and other Places, when they take the *Fritt* out of the *Calcar*, they throw upon it a good Quantity of cold Water, while it is hot, then set it in a Cellar, from whence a Lye will drop, which may be strengthen'd with calcin'd Tartar to be kept for Use, with which they now and then water the *Fritt*; which being heap'd up together in a moist Place, the Space of two or three Months, or more, grows in a Mass, like a Stone, and is to be broken with Mattocks: This, when it is put into the Pot, soon melts and makes Glass as white as Crystal; for this Lye is thought to leave, upon the *Fritt*, its Salt which produceth this Whiteness, and makes it easier to melt, and more Crystalline, as aforesaid.

To make *Crystal Fritt*, commonly call'd *Bol-lis*: Take of the best clear Pebbles, Crystal, *Tarso*, or Flint, ground small in a Mill, and searfed as fine as Flower, two hundred Pounds; of pure Salt of *Polverine*, or *Pot-Ashes*, sifted also, one hundred and thirty Pounds; put them into the *Calcar* when it is well heated; for should the *Calcar* be cold, the *Fritt* would never be made: At first, for an Hour, make a temperate Fire, and always mix the *Fritt* with the Rake, that it may be well incorporated and calcin'd; then increase the Fire, always mixing the *Fritt* well with the Rake; for it is of great Importance, which you must continually do for five Hours, continuing a strong Fire; then take the *Fritt* out of the *Calcar*, being perfected, and put it into a dry Place on a Floor, and cover it well with a Cloth, that no Filth or Dust may fall upon it; and you must take care of this, if you would have good Crystal. The *Fritt*, thus made, will be white as the purest Snow. If the *Tarso* be lean, you may add to the Quantity ten Pounds, or more, of the aforesaid Salt; but this is to be done after making Trial: You ought always to make Trial of the first *Fritt*, by putting it into a Crucible, and setting it in the Furnace; if it grow clear suddenly, you will know whether it be well prepar'd or not, whether it be soft or hard, and whether any more Salt is to be added to it, or to be diminish'd. This *Crystal Fritt* must be kept in a dry Place, where no Moisture is; for by Moisture it will suffer Damage, grow moist, and the Salt of it will run to Water,

and the other Ingredient remain alone, which of itself will never vitrify. This is not to be water'd as the former, but may lie three or four Months; after which it will be much better to put into Pots, and sooner grows clear.

Green Glass Fritt, of which we have yet said nothing, is a Composition made of grosser Materials; to wit, of common Ashes, without any Preparation of them, or else of Goblets ground to a fine Powder, and a hard Sand; this requires ten or twelve Hours baking, more or less, according to the Goodness and Softness, or Hardness of the Sand and Ashes. When the *Fritt* is put into the Melting-Pots, to be made into Glass, in the second, or working Furnace, whether it be Green Glass, White Glass, or Crystal *Fritt*, it is to be melted and kept so long in Fusion 'till it is purified and refin'd, before it is wrought: It purifies itself by sending up a Scum to the Top of it, which is a super-abundant Salt, cast forth from the Metal, and by the Workmen is call'd *Sandiver*, and is to be taken off with the Scumming-Ladle, as the Recrements of the Materials. As *Sandiver* damages the Metal, and makes the Glass obscure and cloudy, being always very foul, and therefore is continually to be scummi'd off, and taken away, as long as any of it rises.

To reduce Glass again into its first Principles; take Glass in Powder, what Quantity you please, Pot-Ashes, as much; mix or melt them in a strong Fire, which immediately put into warm Water, so the Glass will dissolve, the Salt will melt and mix with the Water, and the Sand, &c. will fall to the Bottom; by which it appears that the Fusion of Glass is not the last Fusion, or beyond any Reduction. *Helmont* saith, if you melt Glass in fine Powder, with good Store of *Sandiver*, and set them in a moist Place, all the Glass will soon be resolv'd into Water, whereunto if you add as much *Aqua Regis* as will suffice to saturate the *Sandiver*, you shall find the Sand presently settle to the Bottom, in the same Weight in which it was first put in; for the Salt in the Glass is imbib'd, and taken up by the *Sandiver* and *Aqua Regis*, and so the component Parts, analyz'd into their former Principles.

As to the Way of making Prince *Ruperti's* Glass Drops: They are made of green Glass, well refin'd, for otherwise they will not succeed, but crack and break presently after they are dropp'd into Water: The best Way of making them, is to take up some of the Metal out of the Pot, upon the End of an Iron Rod, and immediately let it drop into cold Water, and lie there 'till it is cold; where observe, first, If the Metal be too hot when it drops into the Water, the

Drop will certainly frost and crackle all over, and fall into Pieces in the Water. 2dly, Every one of them that cracks not in the Water, but lies in it 'till it is quite cold, is sure to be good. 3dly, That the most expert Artists know not the just Measure of Heat required, and therefore cannot promise before-hand that the next shall be good, for many of them miscarry in the making, and oftentimes two or three, or more, prove ill for one that hits. 4thly, If one of them be taken out of the Water whilst it is red hot, the small Part of the Tail or Thread it hangs by, so much of it as has been in the Water, will, upon breaking, fall into Dust, but not the Body of the Drop, tho' its Cavities are full as large. 5thly, If one of them be cooled in the Air, or on the Ground, hanging by the Thread, it becomes, in all Respects, like other Glass. 6thly, The Outside of the Glass Drops that are cool'd in Water, is close and smooth, like other Glass, but within it is spongy, and full of Cavities or little Bubbles. 7thly, The Figure of it is roundish, or oval at the Bottom, not much unlike a Pear or Pearl, wreath'd from the Beginning of the Neck as it grows smaller, and terminat'g in a long Neck, for the most Part bended or crook'd. 8thly, If a Glass Drop be let fall into scalding hot Water, it will crack and break in the Water, either before the red Heat is over, or soon after. 9thly, If it be taken out of the Water before it be cold, it will certainly break. 10thly, If they be dropp'd into Vinegar, or Spirit of Wine, or Water in which Nitre or Sal Armoniac have been dissolv'd, or Milk, they never miss to frost, crack, and break to Pieces. 11thly, If dropp'd in Oil-Olive, they do not so frequently miscarry as in cold Water, nor have so large Blebs or Bubbles in them, but some Part of the Neck, and small Threads break like common Glass; and if the Neck be broken at the Body, and the Body held close in the Hand, it breaks not into small Parts, nor with so smart a Force and Noise, as those made in cold Water. 12thly, If you break off the Tip of the Thread, or Neck, of one of those made in Water, the whole will fly immediately into very minute Parts, which will easily crumble into coarse Dust. 13thly, A Blow with a small Hammer, or other hard Instrument, only upon the Body of one of those made in Water, will not break it. 14thly, One of them broke in the Hand, under the Water, strikes the Hand more smartly, and with a brisker Noise than in the Air; but fasten'd in a Ball of Cement, half an Inch in Thickness, upon the Breaking off the Thread, or Tip of it, it breaks the Ball in Pieces like a Granado. Lastly, Some of them being ground

ground upon a Tile, or other Stone, break when the Bottom is a little flatted, and others not 'till half is rubb'd, or ground off.

To prepare white Glas, or Crystal Glas, take *Fritt* of ordinary Pot-Ashes, to make a fair, white, common Glas; but *Fritt* of the best; whitest, and hardest Pot-Ashes, in great Lumps, makes the Glas, which is call'd *Crystalline Glas*, not Crystal itself. You must put as much *Manganese* in one Sort as to another; cast the white and Crystal-like Glas into Water, that you may have them clear in Perfection. You may make them without this casting into Water; yet it is necessary, if you would have them fairer than ordinary; and may be repeated, if you would have them yet more resplendent, and then you may work them into what Vessel you please. To have the Glas yet whiter, calcine it, that it may purify well, and have but few Blisters; and also add to a hundred Pounds of the *Fritt* three Pounds of pure Salt of Tartar, which you must put in when the *Fritt* is made, and so mix'd with Sand Pot-Ashes sifted, and then be made as before thereof, as before, and so will the Metal be fairer beyond Comparison.

Of colouring Glas.

The calcining Copper or Brass variously for various Colours is done first by *Perotto* of Spain, with thin Copper-Plates laid in Bits upon Sulphur, *Stratum super Stratum*, cover'd, luted, and calcin'd for two Hours, then beaten small and sear'd: Or, 2dly, It is prepar'd with Vitriol instead of Sulphur. 3dly, You may make a Calcination of Brass with Sulphur, thus: Take thin Plates in Bits, which lay upon Sulphur, *Stratum super Stratum*, which calcine for twenty-four Hours; then powder and searfe it, and reverberate again for twelve Days; grind, searfe, and keep it for use to colour Glas of a transparent Red, or Yellow. 4thly, Calcine Brass by itself, by putting Bits of Brass Plates into a Crucible, and luting on the Top; this makes Glas of a Sky-Blue and Sea-Green. 5th, Calcine Scales of Brass *per se*, which if well done will be red. Scales of Brass thrice calcin'd, become of a russet Colour, and will make a Sea-Green, an Emerald, a Turchois, and a beautiful Sky-Blue, with many other Colours.

To tinge Glas of a Sea-Green; take *Crystal Fritt*, put it in a Pot, without any *Manganese* added; melt it, and take off the *Sandiver*: Being well and perfectly clarified, take of this Crystal twenty Pounds; Brass of the first, third, or sixth Preparation, six Ounces; *Zaffar* prepared, one Ounce and half; mix these two Powders well,

and put to the said Crystal at three Times. At first it makes the Metal swell very much, therefore mix the Glas with the long Squares; then let it settle, that the Colour may be incorporated for three Hours; then mix again, with the long Squares, and take a Proof thereof. Put in rather too little than too much of the Colour; for then it may be easily heighten'd. At the End of twenty-four Hours, after it has had the due Colour, it may be wrought, mixing it well first from the Bottom of the Pot, that the Colour may be equally mix'd and spread through all the Metal, and united with it, otherwise it settles to the Bottom, and the Metal at Top becomes clear. At *Morai*, they take half *Crystal Fritt* and half *Pot-Ash Fritt*, and proceed as before, whence arises a fair Sea-Green, but the former is fairer.

For a Sky-Colour, take *Fritt* made of the best Pot-Ashes, which purify from its *Sandiver*; and to twenty Pounds thereof add Brass, of the fourth Preparation, six Ounces, and put it in at three Times as afore said. At the End of two Hours remix the Metal and make a Proof; being well colour'd, leave it for twenty-four Hours, so will you have an excellent Sky-Colour, varied with other Colours, then work it.

Another Sea-Green, yet more excellent, is thus made: Take *Caput Mortuum* of the *Vitriol of Venus*, made without Corrosives, expose it to the Air for some Days, and you draw from it, without any Artifice, a pale green Colour, which being powder'd, to six Ounces of it, add *Zaffar* prepar'd, once Ounce and half; *Crystal Fritt* purified, as before, twenty Pounds: Work as in the first Green, so will you have the most beautiful Colour of the three.

To make a Gold-yellow in Glas, or a Kind of Amber-Colour: *Crystal Fritt* two Parts, pure *Pot-Ashes Fritt* one Part, both made of *Tarso*, which is much better than Sand; but if of natural Crystal it is yet better; mix these well together, of which take twenty Pounds; of *Tartar* well beaten and searfed fine, *Manganese* prepared, of each three Ounces; mix these Powders well together first, then, with the *Fritts*, put them in the Furnace, and let them stand four Days on an ordinary Fire, because they rise much. When the Metal is purify'd and well colour'd, which is at the End of four Days commonly, it will be very fair and beautiful, and is then to be wrought into Vessels, &c. This Colour you may make deeper or lighter, by adding or diminishing the Powders or *Fritts*. If you would have it yet fairer and more beautiful, you must take all *Crystal Fritt*: Moreover, another Thing is to be observ'd; you must put the Powder at several Times into the *Fritt*, not into the Metal, for then it colours not.

To

To make a black Colour in Glass: Take Pieces of broken Glass of many Colours, grind them small, and put to them Powder made of *Zaffar* prepar'd, two Parts; *Manganese* prepar'd, one Part; this Glass, purified, will be a most admirable Black, shining like Velvet, and will serve for Tables, &c. Another brighter Black: Take *Fritts* of Crystal and Pot-Ashes, of each ten Pounds; Calx of Lead and Tin, of each two Pounds; mix all together, set them in a Pot in the Furnace, well heated; and when the Metal is pure, add six Ounces of Powder made of Steel, well calcin'd; Scales of Iron, finely powder'd, of each equal Parts; let them boil twelve Hours, now and then mixing the Metal, then work it. Another Black, yet clearer, is this: Take of the best *Pot-Ash Fritt* twenty Pounds, *Manganese* prepar'd, one Pound and a Quarter, *Tartar* in fine Powder, six Pounds; mix them, and put them into the Furnace leisurely; let the Metal purify, which will be at the End of four Days; mix again well, then cast it into fair Water, and it will be black beyond any of the former.

To make a fair Milk-white call'd *Lattimo*: Take *Crystal Fritt*, twenty Pounds; calcin'd Lead and Tin, of each three Pounds and a half; *Manganese* prepar'd, one Ounce; mix all together, and put them into a Pot heated, let them stand twelve Hours, that the Materials may be melted; and at the End of eight Hours you may work it. It is a fair White; and to make a Peach Colour of it, add a sufficient Quantity of *Manganese* prepar'd, and it will be a Peach Colour; but you must work it in Time, otherwise it will fade again.

To make a deep Red: Take *Crystal Fritt*, twenty Pounds; Tin calcin'd, two Pounds; broken Pieces of white Glass, one Pound; mix these well together, put them in a Pot to run and purify them; being melted, add leisurely, one Ounce of this Mixture; Steel calcin'd and ground, Scales of Iron finely ground, of each alike; mix them well together, and in about five Hours it will be perfected: Too much of the Powder makes the Metal black and opacous, whereas it ought to be transparent; if it be too black or deep, put in of the fourth Preparation of Brass, about an Ounce, and mix them many Times, and in about three or four Repetitions it will become as red as Blood: Make several Trials, and when you find it right and good, work it speedily, otherwise it will lose its Colour and become black; you must also leave the Mouth of the Pot open, else the Colour will be lost. Let it not stand above ten Hours in the Furnace, and suffer it not to cool, if possible. If you find the Colour fades, put in some of the Steel and Iron-

scale Powder aforesaid, and it will restore it again; 'tis a nice Colour, therefore speedily to be wrought.

For a transparent Red in Glass, like Blood, take common white Glass, twenty Pounds, Glass of Lead, twelve Pounds; put them into a Pot glaz'd with white Glass; when the Glass is boil'd and refin'd, add Copper calcin'd to Redness, as much as you please; let them incorporate, mixing well the Glass, then add so much Tartar in Powder as will make the Glass Blood-red: If the Colour be too pale, add more of the calcin'd Copper and Tartar, 'till the Colour is exact. Another transparent Red: Dissolve Gold in *Aqua Regis*, pour Water upon it; then put this Powder of Gold in earthen Pots, to calcine in the Furnace, 'till it becomes a red Powder, which will be in about forty Days; add this Powder by little, in sufficient Quantities, to fine Crystal Glass, which has been often cast into Water, and it will give a transparent Red, a Ruby Colour.

To make Glass of Lead: Take of the best Red Lead what Quantity you please, suppose fifteen Pounds; *Chrysal Fritt*, or common white *Fritt* twelve Pounds; mix them as well as may be, and put them into a Crucible with a strong Bottom, which put into two other Crucibles of like Strength, one within another, and put them into a Fire of Suppression. The Lead will pass through the first and second Crucible, and in the third you will find the Glass. Or thus: Take *Minium* fifteen Pounds; Salt of Pot-Ashes eight Pounds; Sand the same Quantity; mix and put them into Crucibles as before, for fear of breaking; and make a Fire of Suppression, so will you have very good Glass of Lead. To work the said Glass of Lead: Before you take it upon the hollow Iron Pipe, let it be a little rais'd in the Pot, then take it out and let it cool a little, and so work it on the Marble, being clean. At first let the Marble be well wetted with cold Water, otherwise the Glass will scale it, and be itself also discolour'd, incorporating the Scales into itself; and continually wet the Marble whilst you work this Glass, otherwise it will lose all its Fairness and Beauty; and do this as often as you take the Metal out of the Pot. This Kind of Glass is so tender and brittle, that if it be not cool'd a little in the Furnace, before it is wrought into drinking Glasses, Cups, or other Vessels, and taken a little at a Time and held on the Irons, and the Marble continually wetted, 'tis impossible to work it.

To make a Gold-yellow in Glass, of Lead: Take *Crystal Fritt*, calcin'd Lead, or *Minium*, of each sixteen Pounds, mix and scarse them well; add to them Brass thrice calcin'd, six Ounces;

Crocus Martis made with Vinegar, forty-eight Grains; put them well mix'd into the Furnace, let them stand twelve Hours, in which Time it will be clear; mix them, and make a Proof. If it be greenish, add a little more *Crocus Martis*, 'till it becomes a most fair Gold Colour.

A transparent Red in Glafs is made thus: Take impalpable Powder of the best *Manganese*, refin'd Nitre, of each equal Parts, calcine and reverberate twenty-four Hours, then wash away the Salt with fair warm Water and dry the Powder, which will be of a red Colour; add to it its equal Weight of *Sal Armoniac*, grind them together on a Porphyry with Spirit of Vinegar; then in a Retort, with a large Body and long Neck, sublime in Sand for twelve Hours, break the Glafs, and take what is sublim'd to the Neck and Body of the Retort, and mix it with what remains at Bottom, adding as much fresh *Sal Armoniac* as is wanted in the Weight of the first Sublimation; grind, as before, on a Porphyry, with Spirit of Vinegar, and sublime also in the same Manner; repeat this Work so long, 'till the *Manganese* remains all at the Bottom, fusible.

A most excellent Blue to colour Glafs: Dissolve Copper in *Aqua fortis* made with Nitre and Hungarian or Roman Vitriol, which sharpens the *Aqua fortis*, and yields some Particles of Copper to it; then precipitate it with Spelter of Zink; this is sometimes done with the Refiner's double Water impregnated with Copper; by this Means you shall have a most incomparable Blue for colouring Glafs.

There are almost an infinite Variety of Ways to colour Glafs, among which I thought these few might not be unacceptable, to give the Curious a little Insight into this Art, which has of late Years receiv'd such vast Improvement.

[The Plant, from the Ashes of which the Salt for Glafs Work is commonly made, is the *Kali Cochleatum majus*. Paik. 279. *Kali majus cochleato semine*. C. B. Pin. 289. But that which yields the *Alicant Salt*, the purest and best of all others, is the *Kali Hispanicum supinum Annum sedi foliis brevibus*. Act. Reg. Par. Anno 1717, Pag. 93, Fig. Pag. 98.

The several Things used in Medicine which owe their Origin to *Kali*, are

1. The *Pot-Ashes*, or *Cineres Clavellati* of the Shops.

2. The *Sandiver*, or *Axungia Vitri*.

3. The *Soap Lyé*, or *Lixivium*, made by dissolving the Salt in Water, from which the *Causick Stone* is made.

4. *Soap*, which is made of this *Lixivium*, and is treated of in its proper Place.

Beside the Ashes made from the *Kali*, there are the Ashes of the *Rocket*, prepar'd in the same Manner, brought from the *Levant*, and used in the same Manner by the Soapboilers and Glassmakers: And in *Lorrain* they burn the common Female Fern to Ashes in the same Manner, and make a particular Kind of Glafs with them, call'd *Fern Glafs*, which is generally very light and thin, and of a pale Sea-green.]

The End of the Book of LEAVES.

BOOK the Sixth.

OF FLOWERS.

P R E F A C E.

FLOWERS are the expanded Buds of Vegetables, of various Colours and Figures, in which are generally found their Fruits or Seeds. A Flower is composed of three Parts, the Empalement, or Cup; the Foliage; and the Heart, or Centre.

Besides the Flowers of Plants which we usually sell, I shall comprehend in this Book the Parts of Flowers, and some other Vegetable Substances, which have no regular Place under any of the other Classes of this Work, as the Spikenard, Epythymum, and the like.

1. Of Schoenanth, or Camels Hay,

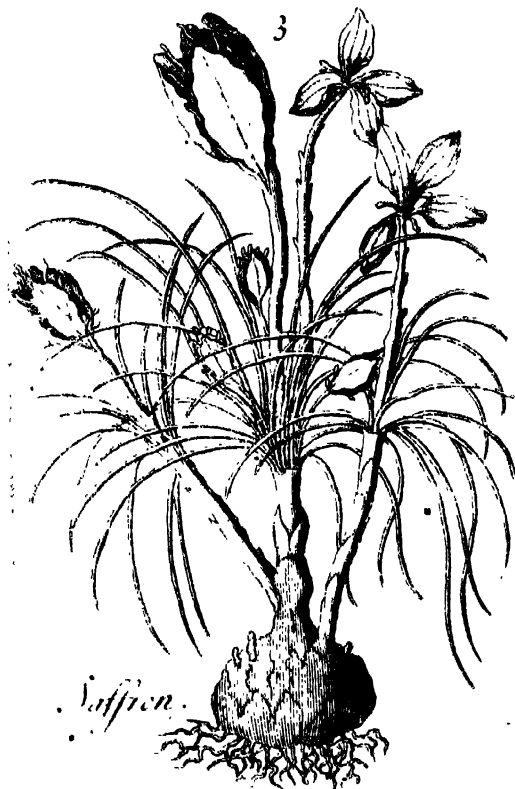
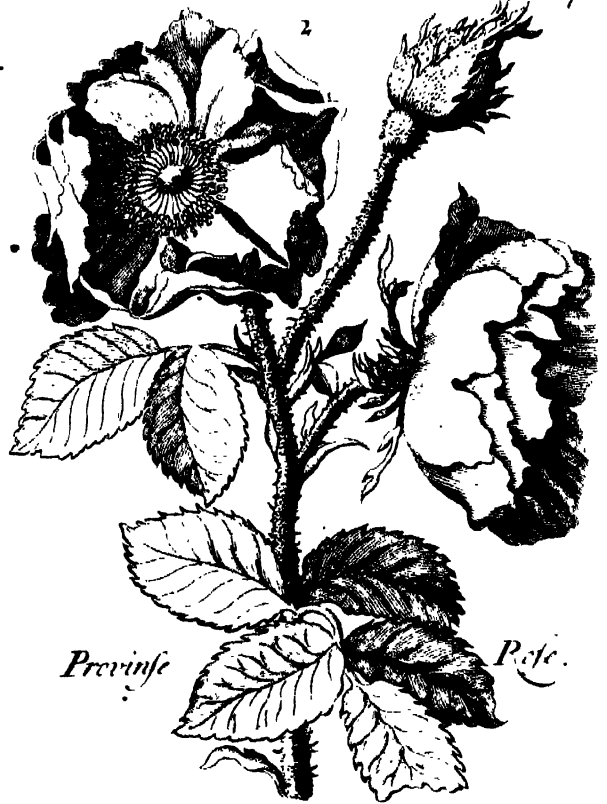
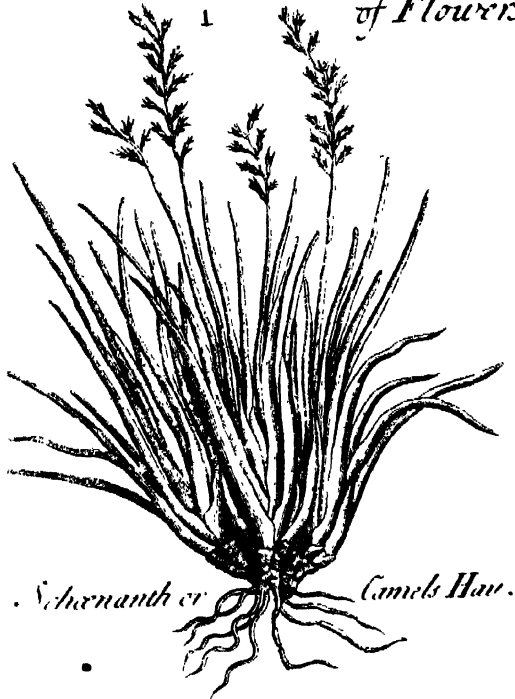
Pomet. **T**HIS *Schoenanth* is the Flower of a small Plant, or, more properly speaking, a sweet Rush that grows plentifully in *Arabia Felix*, and at the Foot of Mount *Libanus*, from whence it is brought to us by the Way of *Marseilles*. This Plant is about a Foot high, the Root being knotty and very little, furnish'd with small, hard, long, white Filaments, and from each Root come several hard Stalks, of the Size, Figure and Colour of a Barley Straw; there arise little tufted Flowers on the Tops of the Stalks, the Bottoms of which are of a Carnation Colour; so that when the Rush is in Flower, it is a very fine Plant to look upon. And as this Flower is agreeable to the Eye, so it is to the Palate, having a warm, biting, aromattick Taste.

We have brought from *Marseilles* the Flower and the Rush separate from one another, to wit, the Rush in little Bundles, and the Flower just in the Manner as it is gather'd; sometimes clean and neat, and other Times nasty and dirty; which is the Reason why such Apothecaries as are curious in their Drugs, clean and wipe every Flower, which is a troublesome Piece of Work. Chuse such as are the newest, and approaching nearest the scarlet Colour that you can get; tho' they are of no considerable Use in Physick, they are requir'd for the making of the Great Treacle.

When the Flower is scarce People use the Plant in its Place, but when the Flower can be had it ought to be used, as it has much more Virtue.

Fœnum Camelorum, *Juncus odoratus* *Schoenanthus*, *Schoenanth*; the fragrant *Lemery*. *Rush*, or *Camels Hay*, is a Kind of Reed, or Grass, which grows plentifully in *Arabia Felix*, at the Foot of Mount *Libanus*, where it serves the People for Forage and Litter for their Camels. The Stalk is about a Foot high, divided into several hard Stems, of the Size, Figure and Colour of a Barley-Straw, being much smaller towards the Top. The Leaves are about half a Foot long, narrow, rough, pointed, of a pale green Colour. The Flowers growing on the Top are ranged in double Order, small, hairy, of a Carnation Colour, and beautiful to the Eye. The Root is small, hard, dry, knotty, adorn'd with long white Filaments. All the Plant, and particularly the Flower, is of a strong Smell and biting Taste, pungent and very aromattick, being preferr'd to all the rest for its medicinal Use; it is incisive, attenuating, deterfive, resists Malignity, is an excellent Vulnerary, provokes Urine, and removes Obstructions.

[The *Schoenanth* is the *Gramen ad Juncum accedens aromaticum, majus, Syriacum*. Hist. Ox. 3. 229. *Gramen dactylon aromaticum multiplici Panicula Spicis brevibus, tomento candicantibus ex eodem pediculo binis*. Pluk. Phyt. Tab. 109. Fig. 1. It is brought from the *East-Indies* and *Arabia*; many Virtues are attributed to it, but its principal Use



Use at present is as an Ingredient in the *Venice Tincture, Mithridate, &c.*

Of Provins Roses.

Pomel. **T**HE Roses, call'd *Provins* Roses, are Flowers of a deep Red and velveted, which are brought from Provins, a little Town about eighteen Leagues from Paris. These Roses grow in such great Quantities about that Place; that it must be allow'd that the Ground there is particularly proper for the raising these Kind of Roses; because in Beauty and Goodness they surpass all that come from other Parts; and that which contributes greatly to their Excellency is, that the Inhabitants thereabout are perfectly skill'd in the drying of them, which makes them keep considerably longer than others, and preserves both their Colour and Smell. We bring now from Provins two Sorts, the larger and the smaller, the Goodness of either of which depends on their Colour, Smell, Clearness from little Leaves, Threads, &c. and then Diness.

Those who make it their Business to deal in large Quantities of *Provins* Roses must preserve them in dry Places, where no Air can enter in, and close press'd or squeez'd, and in such Manner they may maintain their Beauty a Year, or eighteen Months; but about that Time, whatever Cure is taken of them, they lose their Colour, and Worms breed in them. Some put old Iron among them, to hinder the Worms from destroying them.

These *Provins* Roses are Flowers much esteem'd by all the World, because they are astringent and cordial, strengthen the Nerves, and other weak Parts of the Body: They are of considerable Use in Physick, and enter several Compositions of Value. But since, of late Years, these *Provins* Roses were dear, several Druggists and Apothecaries have contented themselves with the common red Roses that are cultivated about Paris and other Parts, since which Time there has not been that Consumption of these Roses as formerly; Nevertheless, those who have made Use of the other Sort have found, that they are not equal to the true *Provins* Rose, either in Beauty or Virtue; besides which, they will not keep so long, notwithstanding all their Pains to preserve them.

The true *Provins* Roses are so esteem'd in the Indies, that sometimes they will sell for their Weight in Gold; beside the great Quantity we sell of these Roses, we also receive them now made into Liquid and dry Conserve, and sometimes Syrup. You must take Care in the Choice of these Things to deal with honest People, for

few they make their Conserve and Syrup, when old, of a fresh, lively red, by adding Spirit of Vitriol, or other Acids to them. The liquid Conserve is used to strengthen the Stomach, and the dry to stop Catarrhs, Rheums, &c. and also against Gripes and Diarrhæas. The Syrup has the same Virtues with the Conserve, but in a lesser Degree: There is likewise a Conserve made of the white Roses, but it is of little Value. We have from the same Place besides, another liquid Conserve, or Honey of Roses, which is made with the fresh Juice of the *Provins* Rose and Honey boil'd together: This is what the Apothecaries call Honey of Roses.

It is of these Roses we make the best Rose-Water in the World; but it depends entirely on the Honesty of the Distiller, whether he will make all of the pure Rose, or with the Addition of a great deal of Water; and most commonly it is made, as I hinted before, of the Rose-Wood. The Use of this Water is so well known, that I need not waste Time to relate to you the great Consumption that is made, both by the Perfumers and the Apothecaries, and the large Quantities daily used by private Families, upon all Occasions, especially in Diseases of the Eyes, &c. Besides the Water, there is a fragrant and inflammable Spirit made of Roses, which is very proper to refresh and exhilarate the Spirits, as well as to strengthen the Stomach. A white and very fragrant Oil, or Essence, may also be drawn from Roses; but the Dearthness of it is the Reason why we sell but very small Quantities of it. The Roses which remain in the Alembick, or Still, after Distillation, and which are found like a Cake in the Bottom, being dried in the Sun, is that which we call *Rose-Cake*; but a Decoction of the Buds being so much better for all Purposes than any thing that can be made from this, it is needless to say any thing farther of it; and the little Use, as well as Virtue, there can be in the Salt made from the Rose, prevents me entirely from saying any thing about it.

Rose, in French and English, a Rose, is a Flower known through the World; *Lemery*. there are two Kinds of it, one cultivated and the other wild. The Rose-Bush is likewise call'd in Latin, *Rosa*; it is a Shrub which bears hard woody Branches, usually beset with strong sharp Thorns; the Leaves are oblong, indented on their Sides, rough in touching, hanging five or seven on the same Stalk, the Flower is composed of several, large, beautiful, fragrant Leaves, supported by a Cup, or Bud, which becomes afterward an oval Fruit, of the Figure of an Olive, whose Bark, or Covering, is a little

fleshy; it encloses, or contains, angular, hairy, whitish Seed; the Roots are long, hard and woody; this Shrub, cultivated or uncultivated, is a Hedge Bush.

The cultivated Rose is distinguish'd into several Kinds; those which are used in Physick, are the Pale, or Carnation Roses; the Musk, or Damask-Roses; the common white and red Roses: The pale Rose, call'd in *Latin*, *Rosæ pallida*, seu *Rosæ incarnatæ*, are fine and large, of a pleasant Red, or Flesh Colour, very sweet to the Smell, and that spread their Leaves wide; chuse such of these as are the most single and least furnish'd with Leaves, because the volatile Parts are less diffus'd, and their Smell and Virtue is the greater: They afford a great deal of exalted Oil and volatile essential Salt; are purgative, attenuate, and discharge a Mucus from the Head, purify the Blood, and purge, chiefly, the bilious and ferous Humours.

The Musk Rose, call'd in *Latin*, *Rosæ Moschata* & *Damascena*, are small single white Roses, which blow not 'till Autumn; they have a Musk Smell, very sweet and agreeable; the best and most efficacious are those that grow in the hot Countries, as *Languedoc* and *Provence*; they yield great Plenty of exalted Oil and volatile Salt: Three or four of these Musk Roses being bruised in a Conserve, or Infusion, purge briskly, so that sometimes they occasion Blood; those of *Paris* do not work so strong, but are more purgative than the pale Roses.

The common white Roses, call'd *Rosæ sativæ albæ*, seu *Rosæ albæ vulgaris majores*, are large, white and fragrant, a little laxative and deterfive, but are not used otherwise than in Distillations: They contain a great deal of Phlegm, exalted Oil, and but a little essential Salt.

The red Roses, call'd in *Latin*, *Rosæ Rubræ*, seu *Rosæ Provinciales*, are of a fine deep red Colour, but of little Smell: They gather them in Bud, before ever they blow, in order to preserve both their Colour and Virtue, which are destroy'd by the Air, if they are entirely expos'd to it. Chuse those that have the highest Colour; those that grow about *Provins* are the finest and most valued.

The red Roses are used for Conserve, and are likewise dried in great Quantities to keep, because they are employ'd to many Purposes, being well dried, so as to preserve their deep red Colour, as well as the Smell they had when fresh. They are astringent, deterfive, proper to strengthen the Stomach, stop Vomiting, Looseness, Hemorrhages, being taken inwardly: Outwardly, they are used for Contusions, Dislocations, Sprains, of the Hands or Feet, for Bruises, and to strength-

en the Nerves and Joints: They are apply'd in Fomentations, Cerates, Ointments and Plaisters. You ought to observe to gather all your Roses in the Morning before the Sun has got high, for then the essential Parts are, as it were, concentr'd by the Coolness of the Night; otherwise, when the Sun has been upon them, it exhales a considerable Part from them. The little yellow Bodies which are found in the Middle of the Rose, are call'd *Anthera*; these strengthen the Gums, and are used in the Teeth-Powders. The wild, or Canker-Rose, call'd *Cynobaten*, I shall speak of in its proper Place.

[The Roses used with us in Medicine are,

1. The Red, the *Rosæ rubra multiplex*. C. B. Pin. 481. *Rosæ rubra valde plena*. J. B. 2. 34. This is used in the Bud for Conserve, and dried for Tinctures, &c.

2. The Damask, the *Rosæ Damascena flore pleno*. Boerh. Ind. A. 2. 152. *Rosæ rubello flore majore multiplicato, fructu pleno, incarnato vulgo*. J. B. 2. 36. These are used for the Damask Rose Water, the *Syrupus rosaceus solutivus*, &c.

3. The White, the *Rosæ alba vulgaris major*. C. B. Pin. 482. *Rosæ Candida plena*. J. B. 2. 44. This is used for the Distill'd Water. And

4. The Dog Rose, or common Bryar. *Rosæ Sylvestris inodora seu canina*. Park. 1017. *Rosæ canina inodora*. Ger. 1087. The Fruit of this is used for the Conserve of Heps.

The *Provins* Rose, so much commended here, is the *Rosæ maxima multiplex*. C. B. Pin. 481. *Rosæ Provincialis sive Hollandica Damascena*. Park. Parad. 413. It is common in our Gardens, but we make no Use of it. The Musk Rose is the *Rosæ Moschata simplicis flore*. C. B. Pin. 482. *Rosæ Moschata simplex*. Park. Parad. 417, which is common in warmer Countries, but never used with us: and the *Rosæ Pallida* of the Shops is but a Variety of the common *Damask Rose*. The *Bedeguar* of the Shops is the spongy Substance frequently found on the Stalks of the Briar. And the *Anthera* are the yellow Chives within the Flower of the Red Rose.]

3. Of Saffron.

THE Saffron, which the *Latins* call *Crocus*, because of its reddish Colour, is the Chive, or Thread of a Flower, of a very beautiful red at one End, and yellow at the other, which is brought from several Parts.

That which bears the Saffron is a bulbous Root, almost like that of the great Shalot, except that it is a little rounder, and of a Colour something redder, from whence arise Stalks, adorn'd

adorn'd with long, green, narrow Leaves; at the End of each Stalk comes a deadish-blue Flower, in the Middle of which are three little Threads, which is what we call *Saffron*.

The best *Saffron*, and which is most valued, is that of *Boisue* in the *Gatinois*, where it is husbanded with great Care, being almost all the Riches of the Country. They plant the Onions, or Bulbs of *Saffron*, in Spring-Time, in Rows like the Vines, in the Earth: The first Year it brings nothing but the Herb, or Leaves, which remain green all the Winter long, 'till the Beginning of Summer, after which the Leaves fall or dye. The second Year it returns with a Flower, in the Middle of which there are three little reddish Threads, which are the *Saffron*; when it is ready to be gathered, which is in *September* and *October*, they gather it before the Sun rises, and then they retire with what they have got; and after it is clean they lay it upon Hurdles, or Bake-Stones, under which is a little Fire to dry it: The next Day they return to gather such as sprung afresh since the other was got; for it is a wonderful Thing that these Bulbs recover again in four and twenty Hours, and continue several Days to be gather'd and dry'd, 'till the Roots will yield no more.

There grow in *France* several other Sorts of *Saffron*, as that of *Orange*, *Toulouse*, *Angouleme*, and of *Menille* in *Normandy*; but the last is the worst of all, and none of the other three are so fine as the true *Gatinois*, for which Reason it is prefer'd before all the rest: And to have the requisite Qualities, it ought to be well dry'd, of a beautiful Colour, long and large, well tufted, of a fine red, good Smell, with the fewest yellow Threads possible, and not smelling either burnt or musty.

Saffron is much used in Medicine, being one of the best Cordials we have. It serves for several Uses, because of its yellow Dye. The *Germans*, *Dutch* and *English* are such Admirers of the *Gatinois Saffron*, that they transport great Quantities of it every Year in Times of Peace, into their own Country. [Here our Author's Love for his Country, or Ignorance of the Goodness of English *Saffron*, which is preferable to any in the World, has led him into a palpable Mistake.]

As there is a great deal of *Saffron-Powder* sold, so it is generally a Cheat upon honest People, that being almost only sold in Powder, which has been used beforehand by the Druggist or Apothecary, to make Tinctures, Spirits, and the like, with. We have *Saffron* brought from *Spain* that is good for little or nothing; they spoil it entirely through their Ignorance, which makes them believe that the *Saffron* will not keep without it

be put in Oil. The Antients made *Pastilles* with *Saffron*, Myrrh, Roses, Starch, Gum Arabic and Wine; formerly they were brought from *Syria*, and used for sore Eyes, and to provoke Urine. This Paste, or Troche, was call'd *Crocomagma*; and by us *Pastilles*, or *Saffron Traches*; but this Remedy is little known or used at present. There may be a Salt and Extract made from *Saffron*, but the Dearness of them is the Reason there is but little made: The Tincture made with Spirit of Wine is used in Hysterical Cases, given in any convenient Liquor, from four to twelve, or more Drops.

4. Of Bastard-Saffron.

Bastard-Saffron is a very common Plant, which grows about two Feet high, furnish'd with Leaves that are rough, pointed, longish, green and slash'd; at the End of each Branch arises a husky Head, of the Bigness of one's Thumb's End, of a white Colour: From this Head come several red and yellow Filaments, or Threads, which is what we call *German Saffron*, *Bastard-Saffron*, or *Flowers of Carthamus*: But as they do not trouble themselves to propagate this at *Paris*, we have it brought from *Alsace*, and both Sides the *Rhine*, where they cultivate it carefully. It grows also plentifully in *Provence*, and other Places.

This *Saffron* is in great Vogue among the Feather-Sellers, and for making *Spanish-red*; but has no Use in Physick, except in its Seed, which the Apothecaries use, after having cleans'd it well, in the Composition of their Tablets of *Diacarthamum*, which it is the Basis of. Chuse such Seed as is heavy, well fed, clean, new and dry, as can be got, and see that it be not mix'd with Melon, or Gourd-Seed; to distinguish betwixt which, know that the true *Carthamum* is round at one End, and pointed at the other; besides that, it is never so white as the Melon-Seed.

5. Of Saffranum, or the Less Bastard-Saffron.

THERE is another *Bastard-Saffron*, brought from the *Levant*, about *Alexandria*, &c. which is in little Threads or Chives, extremely fine and small, curl'd and reddish.

This *Saffron* is also a Kind of *Carthamus*, which differs not from that afore, but only as it is much less. We chuse this Flower of the highest Colour and finest Red; and likewise as fresh as we can meet with. The Use of it is for the

Dyers about *Lyons* and *Tours*, where they consume the greatest Quantity of it, to make their fine Colours, as the bright *Spanish Carnation*, and the like.

Crocus, or *Crocus Sativus*, according *Lemery*. to *Tournesfort* and *Baobinus*, in *English*, *Saffron*, is a Plant which bears several long Leaves, very narrow, and narrow'd. It springs about the End of *March*, or Beginning of *September*, with a low Stalk, or rather Foot, which supports a single Flower, something resembling that of the *Calceolus*, or disposed like a *Flower de Lis*, but much less, being divided into six Parts, of a blue Colour, and with Red and Purple; in the Middle of which Flower rise three small Threads, in the Nature of a Lust, but divided, and of a fine Colour and small, which, when gather'd and dried, is the *Saffron*.

The Root of it is a Bulb as large as a Chestnut, and sometimes bigger, soft, sweet to the Taste, and cover'd with white or pale colour'd Tunicks or Coats, supplied externally with a great many Fibres, whereby 'tis fasten'd to the Ground. They cultivate this Plant in several Parts of *France* (as observ'd by *Pommet*;) but the best is that of *Gatinis*, and the worst from *Normandy*. Choose your *Saffron* new and fresh, that is well dried and oily; but take Care that it be not artificial, by keeping it in oily Skins or Bladders, as is used by some. Let it be of a red Colour, with a little Yellow among it as may be. It abounds with an exalted Oil, mix'd with volatile Salt; and is cordial, pastoral, anodyne, hysterick, alexiterial, aperitive, used sometimes as a Restorative in our Food, and in *Colyries*, to preserve the Eyes in the small Pox. It enters the Composition of some Plasters, particularly *Oxyrocum*, but is chiefly used internally.

The Plant which produces the *Saffron* is the *Crocus Sativus*. C. B. Pin. 64. *Crocus sativus autumnalis*. Park. Bot. 161. The best *Saffron* in the World is that of our own Growth. It is excellent to enliven the Blood, remove Obstructions of the Viscera, and expell the morbid Humours in malignant Fevers. It is said that in *Hungary* and *Poland* they eat it as a Cordial, sometimes an Ounce or more at a Time; but taken in excessive Quantities with us, it brings on Convulsions, Deliriums, and Death, if not prevented. Its usual Dose in Powder is about six Grains, and in Tincture half a Dram.

The *Bastard-Saffron* is the *Carthamus flos Croci*. J. B. 3. 79. *Carthamus officinarum flore Croci*. Tournef. Inst. It is cultivated in some Places, and flowers in *July*. The lesser Kind differs from this only in its Place of Growth and Manner of sowing.

6. Of Balauftine, or the wild Pomegranate.

THE *Balauftine* are Flowers of the wild *Pomegranate*, which are *Pomet*. brought from several Parts of the *East*. We sell two Sorts of *Balauftines*, namely, the fine and the common. We mean by the fine the Husk, together with their Flowers, the common have nothing but the Husk. The *Balauftines* have Use in Medicine, as they are powerful *Astringents*; none choice of such as are fresh, well supplied with Flowers of a deep Colour, that is, a fine Velvet red, a little mix'd with Cream and Dirt as possible. The common Sort are not worth Regard, being in a Manner wholly useless.

As to the domestic *Pomegranate*, we never sell the Flowers of it, but we have Plenty of the Fruit brought from *Provence* and *Languedoc*, as a Fruit that is very agreeable to eat, as well as useful in Physick, the Juice serving to make a Syrup with. We sell principally the Rind of the *Pomegranate*, as being an *Astringent*; but take Care that it be well dried, and does not smell musty: For the most Part of those who sell *Pomegranate-Bark*, sell nothing but such as hath been dried whole, without emptying; and when they are so dried, and come to be used, they have such an ugly Taste, that they are rather fit to make one sick than relieve one.

We sell also what is call'd a dry'd Conserve of *Pomegranate*, which is nothing else but a little melted Sugar colour'd, with the Addition of a little *Cochineal*, *Cream of Tartar*, and *Alum*. This Conserve is difficult to make, because of the small Quantity of *Alum* which is oblig'd to be mix'd with it; and there is nothing in the World more contrary to Sugar than *Alum*; which shews the Error of those who say that they mix *Alum* with Sugar to refine it; and what we here assert is so true, that four Ounces of *Alum* is capable of hindering two thousand Weight of Sugar from incorporating. But to come to our Conserve. It is advisable to keep but little Quantity of it, for there is but little Demand for it, and when it grows mold there is no recovering it to its Consistence again, as we can other Things of that Kind, because of the *Alum*. In a Word, *Alum* is to Sugar as Oil to Ink.

Punica Malus, or the *Pomegranate*, is a Shrub, whereof there are two *Lemery*. Kinds, one cultivated, or domestick; and the other wild. The first is call'd by *Tournesfort*, &c. *Punica quæ malum Granatum fert*, that which produces the *Pomegranate*; by *Parkinson* and *C. Baubinus*, it is call'd *Malus Punica sativa*: The

6



Wild Pomegranate.



Domestic Pomegranate.

7



Arabian Stachas.



Citron or yellow Stachas.

The Branches are small, angular, arm'd with Thorns; the Bark is reddish; the Leaves are small, and resemble those of the Myrtle, but less pointed, hanging by reddish Stalks; of a strong Smell when they are crush'd or bruised. The Flower is large, beautiful and red, inclining to purple, composed of five Leaves, like a Rose in the Hollow of a Cup, representing a little Basket of Flowers: The Cup is oblong, hard, purplish, large at the Top, having, in some Measure, the Figure of a Bell; they call it *Cytinus*. At the Bottom comes a Fruit after the Flower is gone, which grows into a large round Apple, adorn'd with a Crown, form'd by the Top of the Cup; the Bark is as hard as Leather, of a purple Hue, dark without and yellow within. This Apple is call'd in *Latin*, *Malum Punicum*, *seu Granatum*, the *Pomegranate* in *English*. It is divided internally into several Partitions full of Seed, heap'd one upon another, being fleshy, of a fine red Colour, abounding with a very pleasant Juice, each of which contain, in the Middle of them, an oblong Grain, yellow, and sometimes very irregularly form'd.

There are three Sorts of *Pomegranates*, which differ in Taste; the one Sort are aigre, or sharp, the other sweet, and some are betwixt both; manifestly neither the one nor the other prevailing, call'd vinous. These *Pomegranates* are improved in our Gardens, especially in all the warm Countries, as *Spain*, *Italy*, *France*, &c.

The second Sort is call'd *Punica Sylvestris*, the wild *Pomegranate*. This is a Shrub like the former, but more rough and thorny: They gather the Flowers when in their Prime; and they are what they call *Balaustia*, or *Balaustines*; these are dry'd to keep, which the Merchant brings from the *Levant*. The wild *Pomegranate* grows only in the hot Countries, contains in it a good deal of Plegm, Oil, and essential or acid Salt.

The *Balaustines* ought to be chosen new, large, fair, well blown, of a deep Colour, or reddish purple, affording Plenty of volatile Salt and essential Oil. They are proper for Bloody Fluxes, *Diarrhœa*, Ruptures, to stop a *Gonorrhœa*, Whites in Women, and spitting of Blood. The Bark is used for the same Intentions.

The Juice of the *Pomegranate*, which is sharp or acid, is most valued in Physick, as proper to fortify the Stomach, stop Vomiting and Looseness, precipitate Bile and Choler: The Seed is likewise astringent, and used in Injections. There is found upon the Rocks in the Sea, a Stone, in Shape of an Apple, which both in Figure and Colour resembles this, and therefore is call'd a Sea *Pomegranate*.

[The *Pomegranate-Tree*, which bears the Fruit,

is the *Malus punica sativa*. C. B. Pin. 438. *Granata Malus*. Mont. Ind. 42. This is a wild Tree in hot Countries, though only to be seen in Gardens here. It flowers in May.

The *Balaustine-Tree*, which produces the Flowers of that Name, is the *Balaustia Hispanica*. I. B. 1. 82. *Balaustia flore pleno majore*. C. B. Pin. 438.

The Flowers of the first Kind are sometimes used, and are call'd *Cytini*; but they are seldom to be seen in the Shops, as the *Balaustines* are esteemed so much the better Medicine.]

7. Of Arabian Stœchas.

THE *Stœchas*, very improperly call'd the *Arabian Stœchas*, as most *Pomet.* of that which we sell is brought to us from no other Part than *Provence* and *Languedoc*, where it grows plentifully, is the Flower of a Plant which has very narrow green Leaves; this Flower comes in the Nature of a Spike, of the Size of one's Finger's End, from whence arise little blue Flowers, almost like a Violet.

Part of the *Stœchas* we sell comes from *Marfeilles*, by reason of the Plenty they have in the Isles of *Hyer*, which were heretofore call'd *Stœchades*, and probably gave their Name to this Flower. The little Use this Flower is of in Physick, makes it that we sell but small Quantities, which makes it generally old, and of little or no Taste, Smell, or Virtue.

There is another *Stœchas* we sell besides, whose Flowers are of a Citron Colour, to which some have given the Name of the *Yellow Amaranthus*; but the little Use that is made of it, gives me no Encouragement to say any Thing further, but that it is a very common Plant in *Provence* and *Languedoc*. The *Arabian Stœchas* grows so large and thick in *Spain*, that it is found as big as one's little Finger, and the Spikes or Heads sometimes white. The chief Use of it is for Treacle, wherein there needs no farther Direction but to chuse it fresh, good, clean and neat.

Stœchas Purpurea, according to *Bauhinus* and *Tournefort*, is a beautiful *Lemery.* Plant, which bears, in the Nature of a Shrub, several Stalks, of a Foot and a half, or two Feet high, woody, and divided into several Branches. The Leaves are like those of *Lavender*, but much less, narrower, and whiter. The Tops support or carry Ears, or husky Heads that are oblong, mounted each on a Cluster of Leaves, and adorn'd with little Flowers, purple or bluish, disposed in Rows the Length of the Head. There succeeds to each of the Flowers four

four Seeds, that are almost round, blackish, and enclosed in a Covering, which serves as a Cup to the Flower. The Roots are woody. All the Plant has an aromatick Smell, with a Taste something acrid and bitter. It grows in great Plenty in *Languedoc*, *Provence*, and the Isles of *Hyer*, call'd by the Antients the *Stæchas Islands*. It delights in dry and sandy Ground, and is brought dry to the Shops, where the Flowers are only used. It is call'd *Arabian Stæchas*, because the greatest Quantities are brought from thence. It is attenuating, deterfive, aperitive, cephalick, hysterick, strengthens and comforts the Brain, provokes Urine and the Terms, resists Poison, and expels Melancholy.

Some say this Plant grows near the *Rhine*, that it has a pretty large Flower, much in the Shape of Hops, of a fragrant Smell when growing, yellow and bluish, but when dried of a brown Colour, and in Knobs. Those which are the largest, best scented, and least broken, are the best. These Flowers are diaphoretick and vulnerary, used chiefly in Diseases of the Head and Nerves, and by their Fume they dry up De-fluxions. They may be used in Powder, from a Dram to two Drams. A *Lixivium*, or Lye, of the Ashes, in fair Water, will kill Lice and Nits in the Head. The Spirit of this Flower is reckon'd excellent against all cold Diseases of the Womb, Wind, Gripes and Convulsions; and exceeds *Hungary Water* internally or externally. The Syrup of *Stæchas* is given in Coughs, Catarrhs, Barrenness.

[These are the Flowers of the *Stæchas Arabica vulgo dicta*. J. B. 3. 277. *Stæchas purpurea*. C. B. Pin. 216. The Plant is common in *Spain* and *France*; it is cephalick and deobstruent.

There is another Species of this Plant that has a Place in the Catalogues of Official Plants, and is there call'd *Tragium alterum*, which is the *Tragium alterum Dioscoridis quibusdam foliis Trichomanis*. J. B. 3. 279. *Stæchadi serratae Affinis*. C. B. Pin. 216. The Root of this is accounted an Astingent, but is seldom seen or heard of.

The Yellow is the *Stæchas citrina tenuifolia Narbonensis*. J. B. 2. 154. *Elichryson five Stæchas citrina angustifolia*. C. B. Pin. 264. The Flowers of this are accounted good in Obstructions of the Viscera and King's Evil, but they are seldom us'd.]

8. Of Rosemary.

Pomet. **R**osemary is a Plant so common, it would be a needless Thing to give a Description of it, but the considerable Sale there is of what is produced from it, engages

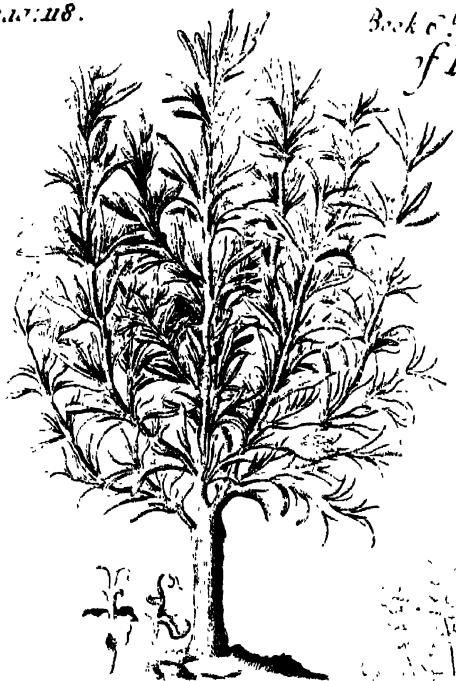
me to treat of it. Therefore I shall begin with the Oil, which is made from the Leaves and Flowers, by Means of an Alembick, with a sufficient Quantity of Water; from which, by the Help of Fire, we have a white, clear, penetrating, and fragrant Oil, indowed with a great many excellent Qualities: But the Dearness of this Oil, by reason of the small Quantity that it yields, occasions certain People to adulterate it, by mixing a considerable Part of Spirit of Wine, well de-flegmated, with it, or else they sell instead of it, Oil of Spike, Lavender, and other aromatick Oils; though it is easy to distinguish Oil of *Rosemary*; as being white, clear, and transparent; of a sweet Smell, and very penetrating.

The Use of this Oil, which is call'd the Essence or Quintessence of *Rosemary*, is not very considerable in Medicine; but it is very much used by the Perfumers, to aromatise their Liquors, Wash-Balls, &c. Some esteem it greatly for the Cure of Wounds, as a very specifick Balsam, which has given occasion to some Strollers and Mountebanks to make it a mighty Commodity, and swear that this is true Oil or Essence of *Rosemary*; when what they sell for it is nothing but Oil of Turpentine and Pitch, melted together, and colour'd with Alkanet.

The next Merchandize we sell that comes from *Rosemary*, is the Queen of *Hungary's Water*, which has made such a Noise in the World for so many Years together, and is pretended to be a Secret deliver'd by a Hermit to a certain Queen of *Hungary*. The great Virtues appropriated to this Water must be owing to the Spirit of Wine and *Rosemary* Flowers, from which two Things it is only made. There are a thousand Cheats imposed upon the World by those who pretend to have the true Receipt of making the right *Hungary-Water*: And these are the People, generally, that spoil this Medicine, by making it of the worst Materials, and in ordinary coarse Vessels; as their Manner is to take the whole Plant of *Rosemary*, infuse it in *Aqua Vitæ*, or common Spirits, and so distil it in an Iron Pot, with an Earthen Cap fix'd to it. You have it describ'd at large, and the best Method of preparing it, by M^r. *Verni*, Apothecary of *Montpellier*, in his *Pharmacopœia*, or Treatise of distill'd Waters, pag. 829. and M^r. *Chevre*, in his *Pharmacopœia*, pag. 632.

The Use of *Hungary-Water* is so universal, and the pretended Virtues so many, that it wou'd be endless to attempt to enumerate them; besides, there are so many Treatises take Notice thereof, that it wou'd be a Work altogether needless.

We likewise sell the dry'd Flowers, and Seed and Salt of *Rosemary*, but in little Quantities.



Rosmaru.



Lavender.



Thyme.



Broomrape or Toothpick Flower.



Pansies or Hearts Eyes.

We have likewise a liquid Conserve of the Flowers. Besides the Oil of *Rosemary*, they bring us from *Languedoc* and *Provence* Oil of Spike, which is made of the Flowers and the small Leaves of a Plant which the Botanists call *Spica*, *five Lavendula mas*, *vel Nardus Italica*, *aut Pseudo-Nardus*, which signifies Spike, male Lavender, *Italian*, or Bastard-Nard: These grow common in *Languedoc* and *Provence*, and upon all the Mountains thereabout. This Oil is frequently adulterated; and many People sell for it Oil of Turpentine, colour'd with a little Petroleum.

This Oil of Spike is proper for several Sorts of People; as Painters, Farriers, and others; besides its Use in Physick, wherein it is accounted cephalick, neurotick, cardiack, stomachick, and uterine; a great Strengtheners of any weaken'd Part, especially the Head or Nerves; excellent against Vertigoes, Lethargy, Apoplexy, Epilepsy, Palsy, Convulsions, Syncope, Fainting Fits, Palpitation of the Heart; a good Specifick to strengthen the Eye-Sight, and open Obstructions of the optick Nerves, cure a stinking Breath, and relieve in the Spleen and Jaundice. We have from the same Places the Oils of Lavender, Marjoram, Thyme, Sage, Mint, and other aromatick Plants.

Rosmarinus hortensis angustiore folio, *Lemery*. according to *C. Bauhinus* and *Tournefort*; or, the Garden Rosemary with the narrow Leaf. This is a woody Shrub, whose Stalk grows four or five Feet high, and sometimes much more, having several long Branches, ash-colour'd, on which grow long narrow Leaves, that are hard and stiff, of a brownish Green without, and whitish underneath; a little succulent, of a strong Smell, aromatick, and of a pleasant agreeable biting Taste. The Flowers are small, but numerous, mix'd among the Leaves, each of which has a Tail cut at the Top into two Lips, of a pale blue Colour, inclining to white, of a sweeter Smell than the Leaves. When the Flowers are fallen, there follow some little Seeds, that are almost round, join'd four together, and enclosed in a *Capsula*, or Covering, which serves as a Cup to the Flower. The Roots are small and fibrous. They cultivate this Shrub in Gardens, but it grows without Improvement near *Narbonne* in *Languedoc*, and flowers in *May* and *June*. The Flower is call'd *Anthos*, which is as much as to say *the Flower*, by way of Excellence. Both the Leaf and Flower are used in Medicine; but those of *Languedoc* are to be valued before any of the more Northern Parts of *France*, because the Heat of the Climate renders the Plant there more spirituous and bitter. It yields a large Quantity of essential Oil and volatile Salt, be-

sides fix'd Salt, which it affords great Plenty of, by burning to Ashes, making a Lye of them, then filtering, and afterwards evaporating in a Sand Furnace to a due Dryness.

[The Official *Rosemary* is the *Rosmarinus coronarius fructicosus*. J. B. 2. 25. *Rosmarinus hortensis angustiore folio*. C. B. Pin. 217.

The Plant from which the Oil of Spike is made, is the *Lavendula minor five Spica*. Ger. 468. *Pseudo-nardus quæ Lavendula vulgo*. J. B. 3. 282. This is a smaller Species of Lavender; but is not that Kind commonly known here by the Name of Lavender, and used in the *Spiritus Lavendula Compositus*, &c. That is the Flower of the *Lavendula major five vulgaris*. Park. 72. *Lavendula latifolia*. C. B. Pin. 216. and indeed is the most fragrant of all the Kinds.]

9. Of Dodder of Thyme.

Epithymum is a Plant like a Bush of Hair, found upon Thyme, *Pomet*. from whence it took the Name of *Epithymum*, or Thyme-Weed. We sell two Sorts of it, to wit, the *Epithymum* of *Candia*, and that of *Venice*: The first in long Threads, of a brownish Colour, and pretty aromatick Smell. The second Sort, on the contrary, is very little, and curled, and has a great deal stronger Smell than the other. There is a third Sort of *Epithymum*, which our Herbarists sell by the Name of *Country Epithymum*; but this ought to be entirely rejected, as it is good for nothing at all, having neither Smell nor Taste, which is the very reverse of the two former, which you ought to chuse fresh, odoriferous, and the least bruised that can be. This *Dodder* is of some Use in Physick, as it is warm, desiccative, and aperitive; besides which it enters into several *Galenic* Compositions.

There is another Kind of a Plant we sell, which we call *Cuscuta Podagra*, *Angina Lini*, *Dodder*, *Whitwinde*, *Gout-Herb*, &c. This Plant is the same Thing with the *Epithymum*, having no Difference; but according to the Plants it grows upon it changes its Name. And to prove what I say, I shall relate what M. *Tournefort* wrote to me on this Subject.

The *Cuscuta*, says he, is a Plant of a singular Kind: It comes from a very small Seed, that produces long Threads or Strings, that are as fine as Hairs, which perish very soon, as also does the Root, unless there are some Plants near it, for it to twist itself about; they catch hold of the Stalks or Branches of any such, and draw their Nourishment from the Bark of the Plant. It bears several Flowers, at Distances, gather'd into Balls: The

The Flowers are like Little Cups, white, tending to a Flesh Colour, cut into four Quarters, in each of which is a round Capsule, membranous, and fill'd with four or five Seeds, small, brown, or greyish, as little as Poppy-Seeds.

This Plant grows indifferently on all Sorts of Herbs, and there are above a hundred Plants to which it clings; and it is believ'd, that as it receives its nourishment from those Plants which it adheres to, it likewise partakes of the same Quality. The *Dodder* that grows upon Flax, or *Cuscuta*, is what we generally use and mean by *Cuscuta*, as that which grows upon Thyme is the *Epithymum*. It corroborates, opens Obstructions of the *Uterus*, and passes by Urine.

Epithymum, fræ *Cuscuta minor*, is a *Lemery*. Kind of *Cuscuta*, or *Dodder*, that is stringy, and winds itself upon any Plant it approaches, being of a reddish brown Colour, and having a pleasant fragrant Smell; that which has fewest Stalks in it is to be preferr'd. By seeing how *Dodder* grows upon Nettles, Hemps, &c. we may apprehend what it is like. It is brought to us out of Turkey, Italy, Venice, and other Parts of the *Straights*. It is reckon'd amongst Catharticks, and said to purge watry Humours and Melancholy; is aperitive, arthritick; purifies and cleanses the Blood; is good for the Spleen and *Hypochondria*, Wind, Rheumatism, and Gout, being beaten to Powder, or taken in Infusion in Water, Wine, or Whey.

[The *Epithymum* is the *Cuscuta minor*, Tourn. Inft. 692. *Cuscuta minor*, fræ *Epithymum*, Buxb. 89. and the common *Dodder*, the *Cuscuta*, fræ *Cassutha*, Ger. 462. *Cassutha*, fræ *Cuscuta*, J. B. 3. 266. Neither of them are at all used in the present Practice.

10. Of Spikenard.

Pomet. **S**Spikenard, or *Indian Nard*, is a Kind of Spike of the Length and Thickness of one's Finger, adorn'd with little brown Hair, or Nap, that is rough, coming from a small Root of the Size of a Quill. They say that the *Spikenard* grows in Tufts or Bushes close to the Ground, and that it raises a slender, long Stalk; but as I never saw it growing, I have set it down in the Manner as we sell it, according to the Figure engrav'd with the Root, to shew that the Root is not so small and slender as Authors wou'd make it. As I have Pieces like that I had the Figure engrav'd from, which I found among the *Spikenard* I keep for Sale.

We sell three Sorts of *Spikenard*, namely, the *Indian Spikenard*, so call'd, because it comes from India, whercof there are two Sorts, viz. the

great and the Small. The second is the *Mountain-Spikenard*, which is brought from *Dauphiny*. And the third is the *Celtick-Spikenard*. The small *Indian Spikenard* is according as it is express'd in the Figure; it is of a bitter Taste, and a strong disagreeable Smell; and the large is of the Length and Thickness of one's Finger, and much of the same Quality with the other; it is usually browner, and more upon the red.

As to the *Celtick Nard*, it is a little fleshy Roots, full of pretty long Fibres, from whence arise little long Leaves, that are narrow at Bottom, and large towards the Middle, and a little sharp at the End; of a yellow Colour, something upon the red; when they are dry'd, and brought to us, they are fit for transporting. In the Middle of the Leaves comes a little Stalk, about half a Foot high; at the End of which are many small Flowers, of a Gold Colour, shap'd like Stars. This *Spikenard* is brought us in Bunches from different Parts, but the greatest Plenty comes from the *Alps*, from whence we have it by the Way of *Marseilles* or *Rouen*. The Use of this is only for the great Treacle, where it undergoes a long and difficult Preparation; for they are forc'd to put this some Time in a Cellar to make it moist, that its little Root may be the easier clean'd, which is the only Part put into the said Composition. One ought to take Care of several little extraneous Plants, which are usually found mix'd with it; as *Bastard Spikenard*, *Hirculus*, or the like. Chuse all the Kinds as fresh and fragrant as possible.

The great *Indian Spikenard* should never be used but when the little one is not to be had; the Mountain Kind ought to be entirely rejected.

Nardus Celtica, or *Spica Celtica*, is a little knotty Root, yellowish and aromatick, being form'd like an Ear, from whence it takes the Name of Spike or *Spica*. It bears fine small Fibres, or slender Tails, pretty long, which support small oblong Leaves, narrow at the Bottom, large or broad in the Middle, and ending in a Point of a yellow Colour; there rises among the Stalks a little Stem of about half a Foot high, bearing on the Top a good many Flowers in Form of Stars: It grows in the *Alps*, *Tyrol*, *Liguria*, *Carinthia*, *Syria*, &c. That is best which is fresh, sweet-scented, with many small Fibres, full and strong, or not brittle; it is hot and dry, and of the Nature of the *Indian Spikenard*, but not altogether so strong; it strengthens the Stomach, expels Wind, is good against the Cholick, and provokes Urine, it may be given in Powder, from a Scruple to a Dram, and in Tincture to half an Ounce.



Little Indian Spicknard.



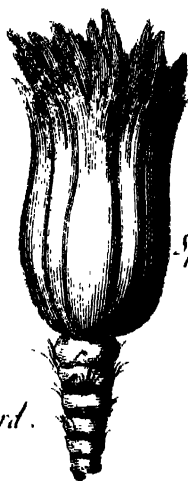
Celtic Spicknard.



Great Indian Spicknard.



French



Spicknard.



Beauquain



Spicknard w^o cut root.

Hirculus.



Bastard

Spicknard.

Nardus Indica, or *Spica Indica*, the *Indian Spikenard*, is a Kind of Ear as long and thick as one's Finger, light, and supplied with long Threads, or Hairs, that are reddish, not brown, of a strong, unpleasant Smell: It grows in *India*, and is brought thence to *Alexandria* in *Egypt*, and from thence to *Venice*, and so hither; and is call'd *Spica*, because it resembles an Ear of Corn. There is a *Bastard Spikenard*, which is a Sort of Lavender; a second Sort of *Narbonne*; and thirdly, a Mountain *Spikenard*, like *Valerian*. When you chuse the *Indian Spikenard*, let it be such as is dry, of a yellowish red, or Cinnamon-Colour, fresh, smooth, with a long Beard, or Fibres, and a sharp Spike, biting on the Tongue, sweet-scented like *Cypress*, and keeping its Scent long. If it be moist or whitish, or rough, and without Hairs, and Fibres like Wooll, it is naught: It is hot, cephalick, stomachick, and alexipharmick; attenuates and astringes; stops Fluxes, yet provokes Urine and the Terms, powerfully expels Wind, and cures the Jaundice; it resists the Malignity and Poison of the Plague, and all Manner of malign and pestilential Fevers: It is used in Powder, besides its being an Ingredient in *Mithridate*, *Venice Treacle*, and other Antidotes. Its Dose is from half a Dram to a Dram and a Half; and there may be an excellent compound Oil made of it, with the Addition of other Spices.

[The *Indian Spikenard* is the Root and hairy Fibres of the wither'd Leaves of the *Gramen Cyperides aromaticum Indicum*, Breyn. Prodr. 2. 53. It is brought to us from the *East-Indies* and *Egypt*.

The lesser Kind of this, mention'd by *Pomet*, differs in nothing from the larger, but that it is the Root of the younger and smaller Plants, and for that Reason is commonly the stronger scented.

The *Celtick Spikenard* is the Root with the first Leaves of the *Nardus Celtica Dioscoridis*, C. B. Pin. 165. *Nardus sive Spica Celtica*, Park. 117.

And the *Mountain Spikenard* the Root and Leaves of the *Valeriana Nardus dicta radice Olivari*, Hist. Ox. 3. 103. *Nardus Montana tuberosa*, Park. 116. This is suppos'd to have the same Virtues with the *Celtick*, but is but little used.]

11. Of Bisnague, or Tooth-Pick-Flower.

Pomet. THE *Bisnague*, or *Visnague*, is the Tufts and Tassels of a Plant whereof you have the Figure under that Name, which grows plentifully in *Turky*, from

whence we have it brought to sell. This Plant is cultivated in several Parts of *France*, but chiefly in the Royal Garden at *Paris*. Of the whole Plant we sell nothing but the Tassels, because the People of Quality, in Imitation of the *Turks*, use them as *Tooth-Picks*; and the rather, because they are of an excellent good Taste: As to your Choice, you need not be otherwise curious, than in taking such as are whole, the largest and fairest you can get.

[These are the Seeds of the *Gingidium Fœniculi folio*, C. B. Pin. 191. *Gingidium verum Syriacum*, Park. 890.

Thapsia orientalis, anethi folio, semine eleganter crenato, Tourn. Cor. 22. Boer. Ind. 60. This is the true oriental Kind. There are also the Seeds of another Plant put to the same Use, call'd the *Spanish Tooth-Pick*, which is the *Gingidium umbella longa*, C. B. Pin. 151. *Visnaga Gingidium appellatum*, Park. 890. *Visnaga*, Boer. Ind. Æ. 49. The Plants have both the same Virtues with Fennel, but are never used, except in the Tassels, which make excellent *Tooth-Picks*.]

12. Of Hearts-Ease.

BESIDES the *Bisnague*, we sell a certain Flower, which is brought us *Pomet*. from *Provence* and *Languedoc*, or from *Lyons*; because of its bluish Colour, and its Resemblance to Violets, when dry'd; upon which Account the Apothecaries use it instead of *March Violets* in several of their Compositions, where the true Violets are required, which is an Abuse, as it has been observ'd by Mr. *Charas*, in his *Pharmacopœia*, the second Edition, Page 334.

But these are not true Violet Flowers, but the Flowers of a Plant, whose Figure is here given under this Head, and which is what the Botanists call *Viola Tricolor erecta, Affurgens Tricolor Dodonæi*, &c. and others *Viola Pentagonia*; in *English*, Pansy or Fancy; *Flos Trinitatis*, by some, *Trinity-Flower*, and by others *Hearts-Ease*: It is call'd the Flower of Trinity from having three Colours; to wit, the Violet, the blue, and the yellow; some have thought these Flowers, tho' erroneously, a proper *Succedaneum* for true Violets; which being so well known in all Countries, and treated of in every Herbal and Dispensatory, I shall say nothing further of, either in relation to the Syrup, Flower, Seed or Comfit; but advise every Body to apply themselves to honest People when they want any of them, that they may furnish them with what is true, natural, and not decay'd.

There are other Sorts of Flowers sold by us, as red Poppy, Colt's-Foot, St. John's Wort, Centaury, Cat's-Foot, and Lilly of the Valley, and several others People are furnish'd with from the Herb-Shops, and publick Markets in Paris, as I told you before; for which Reason there are a great Variety of Samples that we do not keep in our Shops.

Herba Trinitatis, Viola Tricolor, Lemery. Jacca major, seu Viola Tricolor, seu Trinitatis flos, Pansy, or Pansie in French, and Pansy in English, is a Kind of Violet, or Plant, bearing its Leaves upon creeping Stalks, like those of Ground-Ivy; the Flowers are blue, purplish, or white and yellow, without any Smell, each compos'd of five Leaves. After the Flower is gone, there appears a Pod, or Bag, which contains several small Seeds; the Root is fibrous and stringy. This Plant is cultivated in our Gardens, flowers most of the Summer, and yields some essential Salt and Oil: It is incisive,*

vulnery, detersive, penetrating and sudorifick; good for Ulcers of the Lungs, Coughs, Obstructions of the Womb and Gall: The Juice taken in White Wine, &c. is good against Fevers and Inflammations, drank for a Continuance of three Weeks or a Month; it is said to be a Specifick in the Venereal Disease: The same Tincture is much more effectual for that and other Purposes above-mentioned: Dose three Drams in any proper Vehicle.

[These are the Flowers of the *Viola Tricolor*, Ger. 703. *Viola Tricolor major et vulgaris*, Park. 756. They are never used in Medicine, the other Violet we make the Syrup from, possessing all their Virtues in a much greater Degree, which is the *Viola martia purpurea flore simplici odorato*, C. B. Pin. 199. *Viola simplex martia*, Park. Parad. 282. The Syrup of this is the hardest to keep, but is also happily the hardest to counterfeit of any in Shops.]

The End of the Book of FLOWERS.

BOOK the Seventh.

Of FRUITS.

P R E F A C E.

IN this Chapter I shall take in whatever bears the Name of Fruit, and whatever, in Herbs, Plants, Shrubs, or Trees, it is that succeeds the Flower; and likewise, whatever is produced by any of them, whether naturally, or as an Excrecence, as Misselto by the Oak, Agarick by the Larch Tree, and the like: I shall also speak here of what we have from Fruits. Fruits are commonly distinguish'd into two Sorts, to wit, into such as bear Nuts, and such as bear Stones or Kernels. It is said that Fruits are compos'd of three essential Parts, namely, the Skin, or outward Membrane, the Pulp or fleshy Part, and the Fibres or stringy Parts. There are Fruits whose Kernels are cover'd with a Capsula, or Case, that contains the Seed, and others that are not.

1. Of White Pepper.

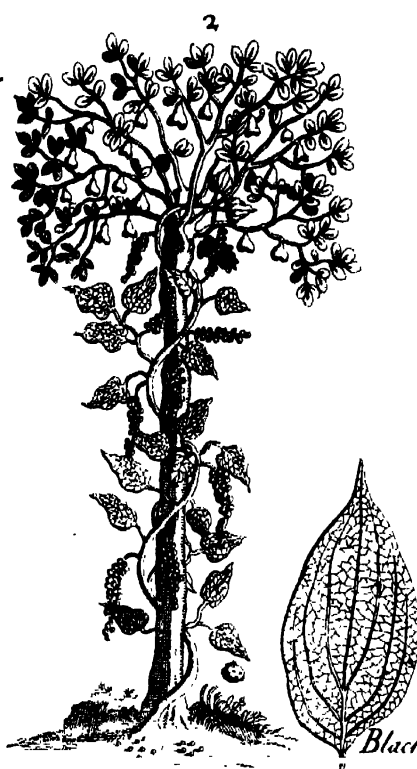
Pomet. **W**HITE Pepper is the Fruit of a climbing Plant, whose Leaves are entirely like those of our Gooseberry; after which come small Clusters, adorn'd

with round Seeds, green at first, but when ripe they are of a greyish Colour.

As this Pepper-Plant cannot support itself, the Inhabitants of those Parts where it grows, plant it at the Root of certain Trees, as the *Arcaea*, which is a Sort of Palm-Tree, very straight and tall; the Cocoa, or other Trees of the like Nature



White Pepper climbing up v Arca.



Black Pepper climbing up v Aduay.



Long Indian Pepper.

Mecazuchit.



Long Indian Pepper of Ame.

ture. But as this Pepper is rarely brought to us, a great many Persons will affirm, that there is no such Thing as true natural *White Pepper*, and that what we have is only the Black with its outward Rind taken off. It is for this Reason I have given you the Figure, and will endeavour to prove the *White Pepper* to be natural in some Places, according to what M. de Flacourt, Governor in the Isle of *Madagascar*, asserts; who says, that the true *White Pepper* grows upon a Creeper, and that the Stalk and Leaves smell altogether as Pepper; and that there are great Quantities in that Country, where the *French* might have a good Establishment, and lade their Ships, every Year, with a great deal of it; for the Woods all about are full of it, so that it is Food for the Turtles and Wild Pigeons. It is ripe in *August*, *September*, and *October*. Tho' some Authors, and among the rest *Piso*, in his History of the *Indies*, and after him Mr. *Charas*, observes, that there's no such Thing as *White Pepper*, it shall not hinder my Belief of it; for it is impossible that they can ever bark Black Pepper, so as to make it smooth and even, as we find the white *Coriander Pepper* that the *Dutch* bring us. And further, when we break the Pepper, we see the outward Skin, which is an infallible Token that was never taken off; and if it had been bark'd, we should have discover'd some Grains with the Wrinkles remaining; and this is such a Truth, that all the Peppers we find bark'd, or husk'd, and blanch'd in *Holland*, we always find a great Part of them plainly to have a wrinkled or wither'd Skin.

Chuse the true *White Dutch Pepper*, the largest, best fed, heaviest, and the least Black amongst it, that you can get; and take Care of such as is blanch'd, which is soon known by rubbing it in your Hands; for the white mealy Colour will change yellow: Besides that, the *Coriander Pepper*, that is not blanch'd, will appear with little Streaks like Ribs; and when beat to Powder, of a fine grey, tending to a white Colour: Its Uses are too well known to detain me any longer on that Head. We pound, or reduce to a gross Powder, the white *Coriander Pepper*, upon which we throw Essence of *Ambergrease*, and then it is call'd *Amber-Pepper*, or *Bergerac Pepper*, which has no other Use than to gratify Persons of Quality.

2. Of Black Pepper.

BLACK Pepper is likewise the Fruit of a Creeper that has large broad Leaves, very fibrous, and supplied with seven nervous Ribs, that are very conspicuous, according to the Figure

which was given me by M. *Tournefort*. The *Dutch* and *English* bring three Sorts of *Black Pepper*, which differ not from the other, but according to the Places where they grow. The first and finest is that of *Malabar*; after that the Pepper of *Jamby*, which comes the nearest to the *Malabar*. The third Sort is a meagre, lean, dry Pepper of *Bilipatham*; and tho' that be the least of all, it is nevertheless most esteem'd by the *Mahometans*, because, they say, the smaller the Pepper is, the better Condition it is of: The smaller Pepper is not so hot as the great Pepper, which is the Reason the *Dutch* rarely bring any of the little Pepper from *India*: Besides, they have a better Trade for the large *Malabar Pepper* than other Nations, in that they never pay any Ready Money, but truck with the Natives for their Commodities which they carry thither, as Quick-Silver, Cinnabar, and the like; whereas the *English* buy theirs with Ready Money; for which Reason they cannot well afford one Bale of *Malabar Pepper*, to a Lot of *Black Pepper* of ten Bales, which makes the Pepper from *England* seldom so fine and large as the *Dutch*.

Chuse your *Black Pepper* well fed, and little wither'd or wrinkled, heavy, and as clean from Dirt and Dust as can be; and take Care of being imposed upon with Pepper, the largest of which has been pick'd out for making *White Pepper*.

The *Black Pepper* is used as the *White*, and is likewise of Use in Medicine, because of its Warmth; for which Reason it is employ'd in some hot Compositions, as *Venice Treacle*, and some others. Druggists sometimes sell it; but it is mostly sold by the Grocers. Pepper expels Wind, and cures the Cholick, so that it is the Basis or Foundation of most of the *Gripe-Waters* that are made: The Tincture is good for most cold Diseases of the Nerves and Brain; as Palsies, Convulsions, Rheumatisms, Sciaticas, &c. The Chymical Oil, whereof this yields but little, is an incomparable Remedy, internally or externally, in Weakness of the Parts of Generation of Men or Women, as likewise in Barrenness; a few Drops of the Oil in any proper Lintment, rubb'd upon the *Perinæum* three or four Times, will restore a lost Erection.

3. Of Fine Spice.

THE Fine Spice is a Mixture of several Aromatics together. To prevent the Abuse that attends this Composition, I have thought fit to give the Receipt of those Things it ought to contain: Take *Black Dutch Pepper*, five Pounds; dry'd Cloves, one Pound and a Half; Nutmegs the same Quantity; fresh dry'd Ginger, two Pounds

and a Half ; green Anise and Coriander, of each three Quarters of a Pound ; powder them separately, and sift them thro' a fine Sieve ; then mix them together, and take Care to keep them close stopt for Use.

It is here observable, That the Generality of those who make the four Spices, use, instead of Pepper, Pepper-Dust ; instead of Cloves, *Jamaica* Pepper ; instead of Nutmegs, white Costus, or a Kind of Bark, that I know not well what to call, but is so like rough Cinnamon, that it is impossible to discover the Difference, but that the Taste is altogether foreign, and has more Likeness to Sassafras, the lesser Galingal and Cloves mix'd together ; and those who sell it, call it Cinnamon-Wood, clov'd Cinnamon, or Clove-Wood, and say, that it is the Bark of the Clove Tree, which is false ; for my own particular, I believe that it is the Bark of a Kind of *Sassafras*.

4. Of Cubebs.

CUBEBS are a little Seed, or Berry, so like the Black Pepper, that if it was not for their little Stalk or Tail, and that they are a little greyish, no Body could find out the Difference betwixt them and Pepper : These grow likewise on a creeping Plant, the Leaves of which are long and narrow ; after which comes the Fruit in Clusters, each being ty'd by the Means of a little Stalk. The Isle of *Java*, *Bantam*, and other Parts of the Eastern World, produce great Quantities of *Cubebs* ; they are of some Use in Physick, from their pleasant Taste, especially when held in the Mouth without chewing ; likewise of admirable Use to make the Breath sweet and help Digestion. They are said to be good for Barren Women, by taking away the Coldness, Moisture and Slipperiness of the Womb.

The best are such as are large, heavy and fresh. Not many Years ago it was disputed what they were ; some said they were a Sort of Pepper like the Black ; others thought they came from the *Agnus Castus* ; and some again said they were the Fruit of a *Ruscus*, or that of *Anomum* ; which were all false Conjectures ; for they are the Fruit of a creeping Plant, as I have before describ'd, and delineated in the Figure.

5. Of Thevet Pepper.

THE Thevet Pepper is a small round Berry, of the Size of White Pepper, reddish as to Colour, and at one End has, as it were, a little Crown ; but as this Pepper is of no Kind of Use, by Reason of its Scarcity, I shall say nothing fur-

ther of it, but only that it has a pleasant aromatick Taste. The Tree that bears it, is of the same Figure, as express'd in the Plate under the Name.

The *Dutch* likewise give the Name of *Anomum* to this Pepper, as well because of its Resemblance to *Jamaica* Pepper in Shape, as because it has almost the same Taste ; and because it is both round and bears the Taste of Clove, it has obtain'd the Name of the little round Clove, to distinguish it from the Clove, or *Madagascar* Nut. They use it in the Place of the common Clove, as the other.

6. Of Long Pepper.

LONG Pepper is the Fruit of a Plant altogether like that which bears the Black Pepper, except that it climbs not so high, but grows commonly in the Nature of a Shrub, and supports itself upon its own Stem, and has smaller and much greener Leaves, the Stalks of which are not so long as those of *East-Indian Long Pepper*.

The *East-India Long Pepper*, which is that we usually sell, is a Fruit of the Thickness and Length of a Child's Finger ; it is, properly speaking, nothing else but a Collection of Seeds together, something red without and blackish within. In each of these Seeds is a Kind of Kernel, or a Sort of white Powder, of a hot biting Taste ; they stick so close together, as not to be separated but by pounding ; and this Mass forms a Kind of Fruit of the Size and Length aforesaid.

The *Dutch* and *English* bring Plenty of this Pepper from *India* ; which, to have its requisite Qualities, ought to be fresh, well fed, weighty, hard to break, sound, and as clear as can be from Dust and Dirt, which it is very subject to be full of. It is of some Use in Physick, as it is an Ingredient in the great Treacle, and some other *Galenical* Compositions ; and is recommended, when bruised into a gross Powder, to boil in any Food, and given to Nurses to increase and give a fresh Spring to their Milk. It warms a cold Stomach, raises the Appetite, consumes crude and moist Humours, expels Wind, provokes Urine, and cures the biting of Serpents, and other venomous Creatures.

7. Of Long American Pepper.

THERE is found in the Islands of *America* a Shrub, which has Leaves almost like those of Plantain, which produces a Fruit about a Foot long, according to the Relation of *Nicholas Monard*. This Fruit is composed of several little Seeds, placed about a long Stalk, ranged in Order and touching one another, and are together of the

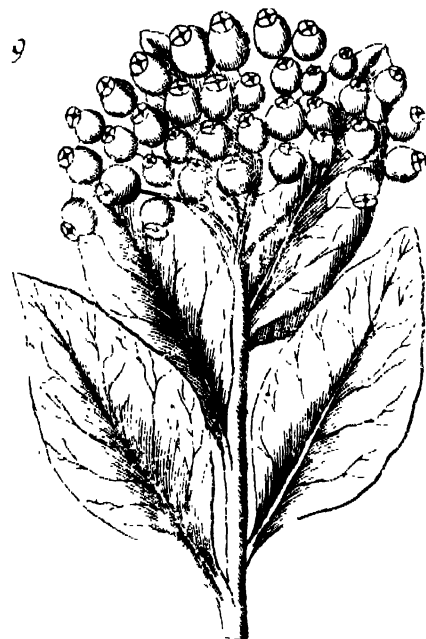


Ethiopian Pepper.

Cubeba climbing up on v' Thevet Pepper Tree



Serts



The Jamaica Pepper or allspice.

the same Shape as the Long Pepper. The same Author says, that the Fruit, when fresh and young, is green; but when the Sun has ripen'd it, black; and that it has more Acrimony than the Long *East-India* Pepper.

This *Long American Pepper* is what the *Americans* call *Mecaxuchit*, which serves them to put into Chocolate. 'Tis likely the Author of the Book of Tea, Coffee, and Chocolate, never heard of this Fruit, for he has taken no Notice of it.

This *Long Pepper*, in Appearance, is that which the Reverend Father *Plumier* means by the Name of *Saururus*, *hirsutis major*, *antorescens foliis Plantagineis*, which signifies, the great Shrub Lizard's Tail, with Plantain Leaves. The Reverend Father observes, that this *Long Pepper* is a Fruit, or rather a Cluster, of half a Foot long, and four or five Lines thick at the Bottom, but grows narrower at the End; and is full of a great many Grains, or Seeds, of the Size almost of Mustard-Seed, which are green at first, and black and soft when ripe, of a hot biting Taste. The same Father says, That this Pepper is much used by the Islanders, as likewise the Root of the Plant, for curing a Disease they call the Stomach-Ach. He further observes, That there are several Kinds of this Plant met with in the Islands, which vary not, save only as to the Size of the Leaves; but as his Account would be too tedious to insert in this Place, I shall refer the Reader to his Book, where it is treated of at large.

8. Of Long Black Pepper.

BESIDES the other two Sorts of *Long Black Pepper*, of which I have been speaking, we sell sometimes, tho' very rarely, a third Sort, by the Name of *Long Black Pepper*, or *Ethiopian Pepper*, *Moorish*, or *Zelim Berry*. This Pepper is the Fruit of a creeping Stalk, which produces neither Leaves nor Flowers, but only five or six Heads of the Bigness of one's Thumb End, hard and roundish, from whence proceed several Pods of the Length of one's Little Finger, and the Thickness of a Quill, brown without and yellow within. These Pods are divided by Knots, and in each Knot is found a little Bean, black without, and reddish within, without any Taste or Smell, which is unlike the Pod, for that is of a hot, acrid, biting Taste, and pretty aromack, especially when held long in the Mouth; and by reason of its great Acrimony, the *Ethiopians* make use of it for the Tooth-Ach, as we do Pelitery of *Spain*. But as this Pepper is little known, and very scarce, I shall trouble you no farther with an Account of it.

9. Of Guinea Pepper.

Guinea Pepper, or *Garden Coral*, which the *Americans* call *Mexico Pepper*, *Tobago*, *Brazil*, *Spanish Long Red Indian Pepper*, *Chilli Axi*, or *Carive*, and we *French Pepper*, or *American Pepper*; is a red Pepper, whereof there are three Sorts, viz. the first, that we sell, which comes in Pods of the Thickness and Length of one's Thumb. The second is much smaller, and as it were emboss'd. The third is much less, and almost entirely round. All the three Sorts of this Pepper, as they hang to the Plant, are green in beginning, yellow when half ripe, and red at last. Of the three Sorts we sell only the first, in that the others are too acrid, so that none but the Natives can use them; they, indeed, are very fond of them.

The *Guinea Pepper* which we sell, comes from *Languedoc*, especially the Villages about *Nismes*, where they cultivate it very much: And this Plant is at present so very common, that we have few Gardens without it. The Use of it is chiefly for the Vinegar Makers, to make their Vinegar; for which Purpose it ought be fresh, in fine Pods, well dry'd, and of a good red Colour. Some People make Comfits of this Pepper to carry to Sea, and the People of *Siam* eat this Pepper raw, as we do *Raffles*: But it is much more grateful to the Palate and Stomach, and must undoubtedly please better in Sauces, being preserv'd in a Pickle thus: Take strong Brine that will bear up an Egg, and Wine Vinegar, of each a Quart; good Spirit of Wine, a Pint; put the Pepper into it, as well unripe and green, as those that are ripe, and of a red Colour.

[*Black Pepper* is the Fruit of the *Lada*, *allii Molanga*, *sive Piper aromaticum*, Pif. Mant. a. 492. *Piper rotundum* ex *Malebar*. foliis latis, quinque nervis albicantibus, Hort. Mth. Zeylan. 32.

The *White Pepper* is the *Piper album* *Leucopiper*, Mont. bot. 9.

The *East-Indian Long Pepper* is the Fruit of the *Hatlancaeye* *sive Piperis longi species*, 2 Hein. 126. *Cattutripali*, Hort. Mal. 7. 27. Tab. 14. This is always gather'd before it is quite ripe, and is brought to us from *Java* and *Malabar*.

The *American Long Pepper* is the Fruit of the *Saururus humilis folio carneso sub rotundo*, Plum. 53. Fig. 70. *Piper longan humiliss fructu c summitate caulis propendente*, Cat. Jam. 45. This grows principally in *New Spain*; it is in some Places made an Ingredient in Chocolate, but we seldom see it here.

The Guinea Pepper is the Fruit of the *Capsicum longioribus filiquis*, Ger. 292. *Solanum Capsicum dictum vulgatissimum*, Hort. Lugd. Bat. 354. There are many Species of this Plant, but the Pods we see preserv'd in Pickles are the Fruit of this Kind.

The Ethiopian Pepper is the *Piper Ethiopianum filiquosum*, J. B. 187. *Carpesium Cord. Piper oblongum nigrum*, C. B. Pin.

The Tree which produces the Cubebs is the *Arbor Bisnagarica myrti amplioribus foliis per siccitatem nigris Cubebe saporis*, Pluk. Alm. 33. *Arbor Baccifera Brasiliensis fructu Piper recipiente*, R. Hist. 2. 1593. We have these from Java, where the Inhabitants boil, or at least scald them in hot Water, before they export them, to prevent their being rais'd any where else.

The Thevet Pepper is the Fruit of the *Xocoxochil seu Piper Tavaſci*, Hern. 30. but it is never seen among us.]

10. Of Cloves.

THE Clove is, properly speaking, the Flower of certain Trees, that is made hard and black by the Heat of the Sun: They were always very common in the Molucca Islands 'till of late Years, the Dutch not being able to hinder the English, Portuguese, and French from going thither, and bringing away Cloves from thence, thought it advisable to make themselves entirely Masters of that Commodity, to pluck up all the Trees, and transport them to an Island of their own, call'd Ternate; by which Means other Nations are forc'd to purchase that valuable Merchandise from them.

As to the Leaf of the Tree bearing the Clove, the Figure here represented in the Plate, was taken from the Original in the Hands of M. Tournefort. Here is also the Root, the Stalk, and the Leaves, in the Figure mark'd A, which came from two Cloves which were planted, and which in a little Time produced that little Root, Stalk, and Leaf, as represented.

When the Clove begins to appear, it is of a whitish green, afterwards reddish, and according as it ripens, it grows brown; and that without being steep'd in Sea-Water, and dry'd before the Fire, as some Authors have observ'd: For the Dutch, and Natives of the Islands, make no other Preparation of the Cloves than after they are beaten from the Tree to let them dry in the Sun, expos'd in the open Field, and after that keep them carefully. As it is impossible but there must remain some Cloves upon the Trees after the Crop is got, these grow to the Size of a Man's Thumb, and contain a black Gum, of a pleasant Smell

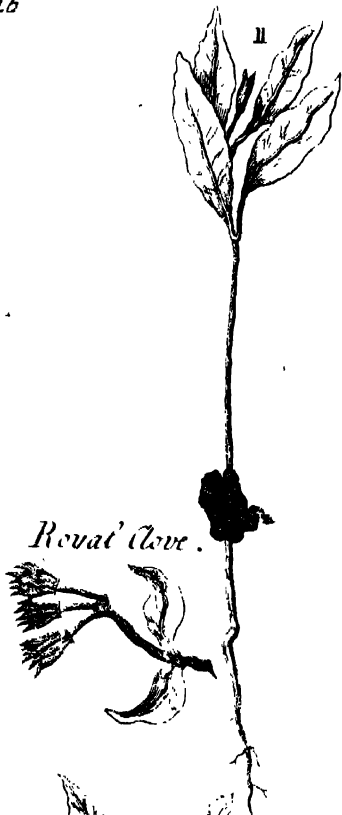
and fine aromack Taste. I never had any so large, but only of the Bigness of one's Little Finger's End. We now and then meet with some of these among the Cloves, but very seldom; because the Dutch sell them separately, by the Name of the Mother-Clove; and these large ones are known in Physick by the Name of *Antophylli*; but the little Use of them is not a sufficient Encouragement to the Apothecaries to enquire after them, otherwise they are proper for Use, as abounding with a Gum, that is vastly more fragrant and aromack, and endow'd with much greater Virtues than the common Clove.

It is observable, that near to where the Clove-Trees grow, no other Tree or Plant will thrive; because the great Heat of these Trees consumes all the radical Moisture of the Earth round about them. It is observable likewise, that there are no Trees or Plants in the whole World that afford so sweet a Smell as the Cloves when they first appear.

Chuse such Cloves as are well fed, or oily, dry, brittle, or easy to break; of a tawny red, well furnish'd with the Top, or Head, to which some improperly give the Name of *Antophyllus*: I mean, that little Head at the Top of the Clove, which is very tender, and of a clear tawny Colour; and which, being put into the Mouth, has a hot, piquant, aromack Taste. Reject such as are lean, blackish, soft, and without Taste or Smell; taking Care that such as are good are not mix'd with such as have had an Oil or Tincture extracted from them, which renders them of a flat, bitter, earthy Taste. The Use of this Drug is too well known to need any Account of its Virtues, which are so considerable, as to give it a Rank among the best Cordials.

The Dutch candy Cloves when they are green, and they make an excellent Confect, which is of great Use to carry to Sea, to correct and expel Wind, prevent Crudities of the Stomach, Fainting, Swooning, &c. as also to restore Nature where decay'd, and recover a weak and languid Constitution, giving Heat and Vigour to the Body, and Motion to the Limbs.

The Dutch distil a great deal of essential Oil from the Cloves, and too often impose them on Strangers afterwards for a true Commodity. This Oil is used by the Perfumers, Surgeons and Apothecaries, in several Compositions, and as a Corrective for many Sorts of Purges, as *Pilule ex duobus*, &c. There is a white Oil of Cloves made by Means of Fire, a Drinking-Glass, and the Bottom of a Scale, as observ'd by Mr. Lemery, but it is scarce worth the Time of doing it, and it is not better than the other Sort.



Royal' Clove.



Clove.



Male Nutmeg.



*AAA Nutmeg
Ceylonuth M*

*A Nutmeg from
whence arises a
Stalk & 2 leaves.*

Female Nutmeg

II. Of the Royal Clove.

THERE is another *Clove* express'd in the Figure, which we meet with now and then in *Holland*, tho' it is but seldom; which is a small Fruit of the Shape and Bigness of a Barley-Corn, and which terminates in a Point, sticking five or six together upon one small Branch; so that they resemble, in some Measure, a little Crown.

This *Clove* is of an Iron Colour, and has the same Taste and Smell as the common *Clove*. They say there is but one Tree that bears this Fruit in all the Country, and that grows in the Middle of the Isle of *Massia*, in the *East-Indies*, where it is call'd, by the Inhabitants of the Island, *Thinca Radoi*, which signifies *Royal Clove*. This Fruit, by the Order of the King of the Island, is guarded by Soldiers, that no Person may have it but himself. They pretend likewise, that when this Tree is loaden with Fruit, the other Trees bend down towards it, to pay their Homage; and the Flowers of the common *Clove* fall off when these begin to appear. They string this Fruit, and make Beads of it, to carry about them, because of its agreeable Smell.

I shall say no more of this *Clove*, having nothing certain that I can collect, and having never seen it, notwithstanding all the diligent Enquiry I have made: But the Thing has been certified to me by a Person who saw it in *Holland*, and *Piso* speaks of it in his Natural History, from whence the Figure is taken; and Mr. *Wormes* quotes it in express Words, in the 203d Page of his Book; the Sense of these Authors I have already given you in *English*, but for the more Curious I shall deliver it in the Original from *Piso*.

Garyophyllus Regius fructus est à nemine quod sciam hætenus descriptus, florem potius quam fructum figurâ referens, longitudine est grani bordei, ejusdemq; ferme latitudinis, oblongus, angulosus, j. x. vel octo cuspidinibus alternatim è lateribus erumpentibus, & in summitate quasi coronulam constitutis; colore ferrugineo, odore Garyophyllorum aromaticorum, sapore acri & planè Garyophyllaceo. Provenit in insula Macciam Indiæ Orientalis; ab incolis vocatur Thinca Radoi, quod exponunt Garyophyllus regius.

Magno in pretio apud Indos sunt hi Garyophylli, & ad nos raro deferuntur. Unicam saltem ferunt esse hujus fructûs arborem in tota India in medio dictæ insulæ sitam. Flores ubi producit hæc arbor decidunt flores reliquarum arborum, quæ communes ferunt Garyophyllos. Arborea etiam reliquæ versus hanc se incurvant, honorem quasi deferentes, ut aiunt qui viderunt. Rex insulæ Satellitibus hanc arborem stipat, quamdiu fructum fert, ne quis præ-

ter ipsum eo gaudere possit. Hæc ex ore ejus qui in insula fuit & arborem se vidisse testatur; quæ, si vera, mira. Fructus filo per longitudinem trajicere solent, ut Armillarum loca, ob odoris gratiam, in brachiis gestentur.

Caryophylli, sive Garyophylli, in English, Cloves: They are call'd a Fruit, Lemery. but are rather an aromatick Flower from an Indian Tree, whose Leaves are long, broad, and pointed. When the Fruit begins to appear, their Colour is of a whitish green; afterwards they grow red, and at last, when ripe, are of a dark brown, as we see them of. The large Cloves are call'd, in Latin, Antophylli, or the Mother-Cloves, but they are very scarce. There is also the Caryophyllus Regius, or the Royal Clove [describ'd by Pomet from Piso.] It has this Name from bearing on its Top a Sort of Crown; for which Reason the King of the Country keeps it in his own Possession; and because there is a common fabulous Opinion, that the other Trees bow towards this as their King.

The *Cloves*, in general, are cephalick, neurotick and cardiack, proper for the Epilepsy, Palsy, and Vertigo; are good in Wind and Cholick, and are allow'd, especially the Oil, to be the best Specifick in the Tooth-Ach. They are used in Powder, Tincture, Water, Spirit, Oil, &c. The Way to make an Oil by Distillation, is to make a Kind of Putrefaction first, in order to dissolve all the Parts of the *Cloves*, and to force the volatile Salt and oily Parts more effectually from the earthy Parts, thus: Take *Cloves* grossly bruised, one Pound; put to them Fountain or Rain Water, lukewarm, two Quarts; cover it with a Vessel close, so as to lute it well; put it into a gentle Heat in Sand for fourteen Days; then put all the Matter into a Copper Vessel, tinn'd within, which cover with its Head and Refrigeratory; add a fit Receiver, lute the Junctures, and distil with an immediate quick Coal Fire, shifting as Occasion requires; continue 'till you have distill'd about two Thirds of the Humidity: This done, and the Vessels being half cold, separate the spirituous Water which swims above the Oil, putting up that into a Glass Vial, which keep close stopp'd for Use: Cohobate the distill'd Water upon the *Fæces*, and distil again as before, so will you have more Oil, which the first Distillation could not raise, which add to the former Oil, keeping the distill'd Water also for other Uses.

Or, Take Powder of *Cloves*, one Pound; warm Water, two Quarts; macerate them for a Fortnight; then put all into a Glass Retort, and distil in a Sand-Heat, with a moderate Fire, so will Oil and Water come over; which separate as before, and cohobate the Water, as in the former

former Operation ; so will you have all that the Clove contains of Oil and volatile Salt, which is cephalick and cordial, besides its other Virtues. It is given from one Drop to three, incorporated with double refin'd Sugar, and mix'd with some proper Vehicle, either liquid or solid ; as in Bolus's, Opiates, Pills, Tablets, or the like, as you see Occasion. It may be also mix'd with Oil of Nutmegs by Expression, to anoint the Temples for the Head-Ach, and the Stomach, to strengthen that Part, and procure Digestion. A pretty cephalick Balsam is made with Oil of Nutmegs, one Ounce ; Oil of Cloves, one Dram ; Musk and Ambergrease, each six Grains ; Oil of Cinnamon, ten Drops ; Oil of Mace, two Scruples ; mix, and make a Balsam for internal and external Uses.

[The common Clove is the unripe Fruit of the *Caryophyllus aromaticus fructu oblongo*. Breyn. Prod. 2. 25. *Caryophyllus aromaticus Indiae orientalis, fructu clavato monopyreno*. Pluk. Alm. 88. The ripe Fruit, the *Antophilli* of the Shops, are seldom seen. It is a Secret among some, who deal largely in Cloves, to keep them in a Cellar or other damp Place, where they will swell and encrease considerably in Weight, and look much better, tho' they really are much worse, than before such Management. The other Trees bending to the Royal Clove, is a Tale too absurd to bear any Animadversions.]

12. Of the Nutmeg.

THE Nutmeg, or *aromatick Nut*, *Pomet.* which the *Latins* call *Nux Moschata*, *Myristica* or *Aromatica*, is properly speaking the Kernel of a Fruit, of the Size of a green Walnut : We distinguish the *Nutmegs* into two Sorts ; to wit, into the Male or long *Nutmeg*, and the Female, or round, common *Nutmeg*.

The Tree that bears the *Nutmeg* is of the Bigness of the Peach-Tree, and the Leaves have a very near Resemblance to those of the same Tree, according to *Dalechamp*, except that they are shorter and narrower ; after which comes the Fruit of the Size of a Walnut or Abricot. This Tree, according to Mr. *Tavernier*, is not planted, but grows by Means of certain Birds, or Fowls, which swallow the Nutmegs whole, and throw them out again without having digested them ; and the *Nutmeg* being then cover'd with a viscous and glucy Matter, and being cast upon the Ground, takes Root, and produces a Tree, which it would not have done, if set in the Manner of others.

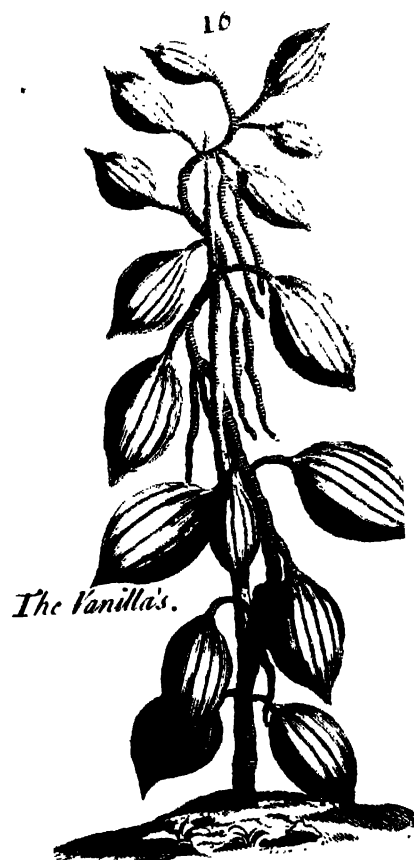
The *Nutmeg* is likewise a Commodity which none but the *Dutch* are Masters of, because it grows no where but in the Isles of *Nero*, *Lan-*

sour, *Pouleay*, *Rosgain*, *Poleron*, *Granapuis*, and *Dame Island* in the great Island of *Banda* in *Asia*, and not in the *West-Indies*, as a late Author says. It is remarkable, that so little a Quantity of Land should furnish all the World with *Nutmegs* ; but it is not hard to be believ'd, when one considers, that these Isles are so stock'd with *Nutmeg-Trees*, that it is almost incredible ; and besides, they lie in so good a Climate, that the Trees are always loaden with Flowers and Fruit, and they have three Crops a Year ; to wit, in *April*, *August*, and *December* ; but that of *April* is much more valued than those which are got in *August* or *December* ; and the Climate is so temperate, that the Men live to a hundred and twenty Years of Age, and have nothing to do but eat, drink and sleep, and walk about, while the Women employ themselves in separating the outer Fruit from the *Nutmeg*, drying the Mace, and breaking the Shells wherein is the *Nutmeg* ; being the chief Commodity of the Country, and almost all they live by.

The *Nutmegs* we sell are nothing but the Kernels of the Fruit, which are cover'd with a hard, thin, and blackish Shell. Without this Shell there is found a covering, which is thin and reddish, of a sweet Smell, and aromatick Taste, and is what we call Mace, but vulgarly, and improperly, the *Nutmeg-Flower*. After the Mace there is a green Pulpy Fruit, that is of no Use. From this it is to be observ'd, that the *Nutmeg* has three Wrappings, or Coverings ; to wit, the Shell, the Mace, and the Pulpy Fruit, and not barely two, as a late Author has observ'd ; and the Thing is so evident, that if any Person will give himself the Trouble to cut a preserv'd *Nutmeg* in two, he will find the three Parts, about which I have been speaking.

The Trees which bear the Female, or common *Nutmegs*, grow not but in cultivated, or improv'd Lands ; but those which produce the long *Nutmegs*, grow in Woods and Forests, which makes the *Dutch* call 'em wild *Nutmegs* ; but they are little used, because they are almost without Taste or Smell, and void of any Virtue, and for this Reason they are seldom brought hither : These Male *Nutmegs* were call'd by the Ancients *Azerbes*.

As to the common *Nutmegs*, we ought to chuse such as are heavy, firm, hard, and of a full Plumpness, of a light grey, whose Inside is finely marbled, and reddish, and such as are of a fat, oily Body, which are the Signs of their Newness, and which being grated afford a sweet Flavour, and put into the Mouth, yield a warm, piquant, aromatick Taste. As to the little Hole that is met with so very common in *Nutmegs*, 'tis a vulgar Error to believe, that that makes them lose



lose their Virtue; for there is no *Nutmeg* without it, as may be seen when the thin Rind is raised.

The Use of the *Nutmeg* is so well known, it would be needless to say any Thing of it; I shall only add, that it is valued in Medicine, and being beat up with Sugar, there is a Powder made of it, which is admirable, taken in warm White-Wine, for curing of Catarrhs and Rheums, that proceed from cold Causes; and this is call'd the Duke's Powder. The usual Quantity is to put two Ounces of *Nutmegs* to a Pound of Sugar, and some add Cinnamon. The Inhabitants of the Isle of *Banda* make a Confection of the green *Nutmegs*, which is brought to us by the Way of *Holland*, sometimes with Syrup, and sometimes without. These are one of the best Preservers we have, being very proper to strengthen and invigorate the Stomach, and to restore a natural Heat to Age; but their chief Use is to carry to Sea, particularly by the Inhabitants of the northern Parts, where they are much esteem'd; the People there being great Lovers of these Sorts of warm Sweet-meats.

As to the Oil of *Nutmegs*, by Expression, that which is brought us from *Holland* is no better than fresh Butter; for which Reason the Apothecaries ought to make it themselves, rather than buy it at such a cheap Rate, when it is good for nothing. The true Oil of *Nutmegs* ought to be of a thick Consistence, of a golden yellow, a sweet aromack Smell, and a warm, piquant Taste. The Manner of making this Oil is so easy, and hath been so long known to every Artist, that it would be superfluous, at this Time of Day, to pretend to teach it; only this may be observ'd, that when it is expressed, it will be liquid and clear; but when cold it coagulates, and becomes yellowish, of a solid Consistency, and that it will yield a double Quantity of Oil this Way, from the same Weight, of any other Spice, Fruit, or Seed whatever. There is likewise another Oil made by Distillation, which is a white, clear Oil, very fragrant, and has double the Strength and Virtue of the Former; and whatever the *Nutmeg* has singly in itself, is hereby highly exalted; so, that four or five Drops is a Dose in any proper Vehicle; wherein it becomes cephalick, acrotick, stomachick, cordial, hepatick, uterine and alexipharmick; good against all cold Diseases of the Head, Nerves, Womb, &c. expels Wind, and cures griping of the Guts. The Mace, which grows round the *Nutmeg* has all the same Virtues; dissolves Wind, helps Concoction, cures flatulencies, strengthens the Circle in the Womb, stops Fluxes and Vomiting: It is of thinner Part than the *Nutmeg*, and there-

fore more piercing. The Oils, by Expression and Distillation, are made the same Way as those of *Nutmegs*. Chuse such as has the largest Blades, the highest and freshest Colour, and that is the cleanest you can get. As to the Bark of the Trunk, and the Branches of the *Nutmeg-Tree*, it is so little used, that it is not worth speaking of, and is seldom brought hither; by Reason of its great Likeness to the white *Coflus*, both in Figure and Taste. Some sell *Coflus* for the *Nutmeg* Bark, but that you ought to beware of.

Nux Moschata, *Moschocaryon*, *Nux Unguentaria*, or *Nutmeg*, is a Kind of *Lemery*. Nut, or Fruit, of a foreign Tree, as large as a Pear-Tree, with Leaves like the Peach, but much smaller. The Flower is in the Shape of a Rose, of a pleasant Smell; after the Flower is fallen off, a Fruit appears as large as a green Walnut, cover'd with two Barks; the first, which is very thick, is pull'd off when the Fruit is ripe; the second is much thinner and finer, reddish or yellowish; it is separated from the *Nutmeg* in order to dry, and is what we call Mace, not the *Nutmeg* Flower; this yields a great deal of Oil and volatile Salt.

When the *Nutmeg* is separated from the Barks, they dry and preserve it. The Tree which bears this grows plentifully in the Isle of *Banda*, where there are two Sorts, the wild and the cultivated, or male and female: The male, which is a long and large Nut, is seldom used: The female, which is the rounder and lesser Nut, is that generally sold in the Grocers Shops. When gather'd, some say they are laid in Quick-Lime, in the *Indies*, for two Reasons: First, that being carried into other parallel or proper Climes, they might not grow, for so in Time it might prove to their Damage. 2dly, that being thus cur'd, the Worm, might not take them. The best are those of a reasonable Size, fresh, heavy, firm, not spungy, of an Oilyness when grated, and of a pleasant Smell and Taste, not too bitter or acrid. They fortify the Brain, Nerves and Stomach, assist Digestion, expel Wind, provoke the Terms, and resist Putrefaction.

Chuse your Mace fresh, whole, of a yellow Colour, a good Smell, and agreeable Taste, being a little acrid. It has the same Virtues with the *Nutmeg*, but more exalted, and it acts with greater Penetration and Efficacy. The Mace Bark or Wood of the Antients, is the Bark of the Trunk of a Tree of the same Name, which grows in *Barbary*, and is thick, reddish, and of a bitter, smart Taste. Its Virtue is astringent, and proper to stop the Bloody-Flux, and other Fluxes of the Belly; but this Bark is seldom brought

brought among us ; they impose it instead of Mace, tho' the Qualities are different, and so confound the Mace Bark with the true Mace.

[The Tree which produces the *Nutmeg* and Mace, is the *Nux Moschata fructu Rotundo*. Jonsl. Dendr. 158. *Nux Moschata sive Myristica, Nucissa*. Mont. Exot. 9.

What we call Oil of Mace by Expression, is the expressed Oil of *Nutmegs*, brought from the *East-Indies* in Jars, but this is of late become scarce, because we have from *Holland* a much cheaper, but much worse Kind of the same Oil.

There is indeed a true Oil of Mace by Expression, made in the *Indies*, but it is seldom or never brought into *Europe* ; it is express'd from the Mace while fresh, and is fluid, of a reddish Colour, a strong Smell of Mace, and is usually something thicker at the Bottom than at the Top of the Vessel it is kept in.

What is sold in the Shops of our common Retailers of Medicines who call themselves Chymists, under the Name of Oil of Mace by Expression, is a base Mixture of Sewet and Palm Oil scented with a little of the *Dutch Oil of Nutmeg* by Expression.]

13. Of Coffee.

Caffe, Coffe, Coffi, Buna, Bon, Ban, Pomel. *Caffe, Coffe, Coffi, Buna, Bon, Ban,* or *Elkairé*, is, according to a modern Author, the Fruit or Berry of a Plant, whose Stalk resembles that of our Bean ; but as he is a Person on whom we can have no Dependance, I shall hold with that celebrated Author, *Caspar Baubine*, who says, that Coffee is the Fruit of a Tree, whose Berries are brought from *Arabia Felix*, and that the Tree is like the Spindle-Tree, or *Euonymus*, and that the Leaves are thick, and always green, of the Shape represented in the Figure, which is taken from the said *Baubinus*.

Chuse your Coffee greenish, fresh or new, and that does not smell musty, but whose Berry is of a middle Size ; in short, the cleanest, dryest and plumpest that can be had. As to those who buy whole Bales together, let 'em take Care that the Bottom of the Bales be not mouldy, which will spoil and damage the whole Cargo. Coffee is used for little or nothing that I know of, but to make a Liquor with Water and Sugar, which is more or less esteem'd, by different Nations ; where it is valued, there is a great Consumption made of it, in the prepar'd Berry ; which is done by drying it in an Oven or Kiln, so long, 'till it is well parch'd, or rather half calcin'd, and looks not of an absolute Black, but rather of a dark Purple, inclining to black ; if it be well burn'd,

and not over high, it has a grateful Flavour ; but if over much or too little done, or if afterwards it be ground any Time before it be used, it loses all its Virtue ; so that in making Coffee, the Powder is to be fresh ground, and used immediately ; for an Hour's Time will pall and flat it, so as it shall lose all its volatile Parts, which float like an Oil upon the Liquor, when fresh ; but upon the least keeping, after reduc'd to Powder, its essential Particles are so subtle as to fly away, or be destroy'd by the corrosive Nitre of the Air, which being expos'd to but for a few Minutes, they instantly imbibe.

Caffe, Coffe, or Coffee, is a small Berry, longish and round, like a Pine *Lemery*. Apple Kernel, of a dark brown Colour ; its Bark is a Kind of Husk that is a little hard and woody ; it encloses a Berry as large as a Pea, of an oval Figure, dividing itself into two Parts, yellowish, inclining to white ; the Fruit grows upon a Tree of the same Name, which is common in the *Arabia Felix*, from whence it is transported through all the Dominions of the great *Turk*, and from *Turkey* brought to us, as is supposed, cur'd, that it may not be planted in other Countries.

It is of an excellent drying Quality, comforts the Brain, and dries up Crudities in the Stomach : Some Author says, it cures Consumptions, Rickets and Swooning Fits ; it helps Digestion, eases Pains of the Head, rarifies the Blood, suppresses Vapours, gives Life and Gaiety to the Spirits, hinders Sleepiness after Victuals, provokes Urine and the Courses, and contracts the Bowels ; it is an excellent Dryer, fit for moist Bodies, and most Constitutions, but that of young Girls, subject to the Green-Sickness ; and likewise is prevalent in such as are apt to have running Humours, Sores, or King's Evil upon them : It prevents Abortion, and confirms the Tone of the Parts drunk after eating ; but with this Observation, that this Liquor be always made fresh ; for if it stands but two or three Hours, it will be pall'd and grow naught. It is an effectual Remedy against Worms in Children ; so that if the Mother drink but frequently of it, when with Child, the Infant shall not be afflicted with Worms, during its Infancy.

[The Tree which produces Coffee, is the *Jasminum Arabicum Castaneæ folio flore albo odoratissimo cujus fructus Caffe, in officinis dicuntur*. Com. Pl. Us. 85. *Bon Arbor cum fructu suo Buna*. Park. 1622. It is a Native of *Persia* and *Arabia Felix*, but is now become common in the Gardens of the Curious, and flowers and bears its Fruit with us ; it grows to about six Foot high, the Leaves are like the Bay Leaf, but longer, the Flowers

Flowers pentapetalous, and the Fruit like Bay Berries within ; which is the *Coffee* we use.

The greatest Part of the *Coffee* we sell, is brought to us from *Mocha*.]

14. Of the Cacao, or Chocolate-Nut.

THE *Cacao* is the Fruit of a Tree which grows in the *Indies*, of the Bigness of the Orange-Tree, but with Leaves longer, and more pointed ; the Flower is large and yellow, which when fallen, leaves long, lanuginous, green Filaments, from which grow pointed yellow Fruits, which, as they ripen, become of the Size of a Melon ; each of these Fruits contains twenty or thirty Kernels, as large as Pistachia Nuts, and sometimes there are as far as fourscore Kernels in one Fruit. Each of these is cover'd with a yellowish Pellicle, which being taken off, there appears a tender Substance, divided into several irregular Parcels, of an oily rich Taste, leaving something of a Sharpness behind them in the Mouth.

Wormius, in Page 191 of his Book, makes mention of four Sorts of Trees which bear the *Cacao Nut* ; the first and second whereof are call'd *Cacabuaquahuil*, the third *Xuchicacabuaquahuil*, the fourth *Tlacacabuaquahuil* ; which Account agrees very well with the four Sorts of *Cacao* we sell, which certainly come from different Trees ; the first and best Sort are call'd the large and small *Carack*, from the Province of *Nicaragua*, from whence these Sorts of *Cacao*'s are brought : The third and fourth are call'd the large and small *Island Cacao*'s, because they come from the *American Isles*, as *St. Domingo*, &c. The most valued of the four Kinds of *Cacao*'s is the large *Carack*, especially for making *Chocolate*, which is their chief Use ; for the small Quantities that are eat of them as they come over, are not worth speaking of ; they ought all to be chosen fresh, plump, weighty, blackish without, and of a deep red within, well tasted and not of a musty Smell : The small *Carack* is as near approaching to the Qualities of the large as can be. As to the *Island Cacao*, especially the large, the nearer it comes to the *Carack*, the better it is. Some Authors say, that the *Cacao* is in such Use in *Mexico*, that it is the chief Drink of the Inhabitants of the Country, and that they give it as Alms, or Charity to the Poor : The other Sorts also that come from the Isles, are ground to make Bread of different Sizes, for the Use of different Sorts of People.

The *Cacaos*, or *Cacao*, is a Kind of *Lemery*. Almond that is made the Basis or Foundation of *Chocolate*, and from whence it takes its Name.

It grows in all the *Spanish West-Indies*, *Guatemala*, *Hispaniola*, *Cuba*, *New-Spain*, *Jamaica*, &c. in hot, but shadowy Places, being planted in Ranks and regular Walks, shady Plantane-Trees are rang'd with it ; the one to shelter the other, lest the parching Sun, by its excessive Heat, should kill it, or the boisterous Wind injure it. This *Cacao*-Tree, not exceeding our Cherry-Tree for Bigness ; as it is a Tree of singular Beauty, having large, broad, oblong, green Leaves, which fall back, and hang like so many Shields, to preserve and defend the tender Fruit ; so it is a Tree of great Profit to the Owner, arising from its most desirable Fruit, which grows after an admirable Manner in Cods ; studded, as it were, in the very Body of the Tree, as well as the Arms and Boughs, from the very Earth upwards ; each Cod containing about thirty or forty Nuts, regularly set in a Mass of soft, slimy Pulp, to preserve, as well as nourish, the tender Fruit. The Nuts, among the *Indians* and *Spaniards*, go for current Money, even in those Countries where Gold and Silver are naturally produced ; there is in them Food and Raiment, Riches and Delight all at once !

The Cod is said to be very like the Pear or Pear-fashion'd Gourd. Each Nut is about the Bigness of an Almond Stone, and cover'd with a thin Shell, blackish without, containing within a brownish red, or almost Chestnut-colour Kernel, with brownish Ash-colour'd Veins, which to the *Indians* is pleasant in Taste, tho' not altogether so to us. The Cods being gather'd, they break them, take out the Nuts, and lay them upon Mats to dry in the Sun, 'till the Moisture within them be consum'd, and then keep them both for Meat and Merchandize.

This Fruit is cooling, as may easily be discern'd by their cold nitrous Taste. They open Obstructions, restore in deep Consumptions, stimulate to Venery causing Procreation and Conception, facilitate Delivery, preserve Health, help Digestion, make People inclinable to feed, ease Coughs of the Lungs, Gripings of the Bowels, and Fluxes thereof, cause a sweet Breath, and assist in a Difficulty of making Urine. The chief Use of them is in *Chocolate*, which is so well known, there needs no longer Discourse about it.

[The *Cacao* is the Fruit of the *Arbor Cacao*. *Pis. Mant. A. 197. Cacaoa Quavit sive Arbor Cacar Cacarifera*. *Hern. 79*. It is cultivated in *Cuba*, *Jamaica*, and other Parts of the *West-Indies*. It is a tall Tree, with a smooth even Bark, the Leaves are long, smooth, and pointed, and the Flowers pentapetalous, and of a very beautiful yellow.]

15. Of Chocolate.

Pomet. WE sell several Sorts of *Chocolate*, which have no other Difference but according to their Fineness and Goodness, the Drugs that compose them, and the Countries where they are made. But the best *Chocolate*, and the finest, is what is made with the largest *Carack Nut*, and wrought up with the finest Sugar, good Cinnamon, and the purest and best *Vanillas*: In short, what is made by an honest Man, who understands how to prepare it, and will neither spare Labour nor Cost; it is impossible to afford good *Chocolate* at a low Price; and the most of those who sell their *Chocolate* at such easy Rates could scarcely buy the fine Sugar they ought to make Use of at the Price. Although some still cry up the *West-India*, *Spanish*, *Portugul*, and *St. Malo's Chocolate*, at this Time there is no Place in the World where they make better *Chocolate* than at *Paris*. I did not think it proper to give you the Composition here, since there are so many Books that treat of it, and the Compositions are so various, that every one is for pleasing his own Fancy. Nevertheless, I cannot forbear acquainting you with what is proposed by the *Sieur Blegny*, in his Book, who mentions the Flower of *Orejeucas*, to be added to the Composition, because it is a Drug which I believe to be imaginary, as not being able to know what it was, after the most diligent Search I could make. And the *Sieur Blegny*, who calls himself the Author of that little Book which I have just mention'd, had Reason to say he could not meet with it among the Druggists; for he could not give me any Account of it. When I ask'd him, before a certain Person, what the *Orejeucalla* Flower was? he told me, it was what went into the Composition of the *American* or *Indian Chocolate*, which I suppose was what he had read somewhere. As to the *Achiote*, that is nothing else but what we call the *Rocou*, which is not made, as the said Author says, but as it is set forth in its proper Place in this Treatise; and if he had known that the *Achiote* was the *Rocou*, there are very few Grocers but could have furnish'd him with it; so that he needed not have put it in his Book, that he could not meet with it at the Druggists.

[*Chocolate* is made by attenuating the Oil of this Fruit by Heat; and, according to the different Degree of Heat, used in the making it, and the Spices mix'd with it, it is seen to have very different Effects in heating, or in only nourishing and strengthening. The best and nicest Judges are of Opinion, that the two Kinds of *Cacao*, mix'd together, make the finest *Chocolate*. The *Orejeucas*

Flower, which our Author thinks an imaginary Drug, is the Flower of the *Xochinacasthe seu flos Auriculae*, Hern. 30. R. Hist. 2. 1671. *Orejeucas seu Orichelas*, Hughes. *Fructus oblongus cineraceus acidulus*, C. B. Pin. 406. It grows in *New Spain*; the Flower is very fragrant, and is there used sometimes in *Chocolate*.]

16. Of Vanilla's.

Pomet. THE *Vanilla's*, according to the *Sieur Roussseau*, are Pods of about half a Foot long, of the Thickness of a Child's little Finger, which hang upon a Plant of twelve or fifteen Foot high, that climbs like a Creeper; for which Reason it grows most frequently along Walls, or at the Roots of Trees, or some other Kind of Props, or the like, whereby it may be supported. The Plants have round Stalks, disposed in Knots like the Sugar Cane; from each Knot there put forth large thick Leaves, about a Finger's Length, which are green, of the Colour of the Stalk, and very like those of the great Plantane, after which come Pods, which are green at first, yellowish afterwards, and grow browner as they ripen. When they are ripe, the People of *Mexico*, those of *Guatemala*, and *St. Domingo*, gather them, and hang them up by one End in the Shade to dry, and when they are dry enough to keep, they rub them with Oil, to hinder them from drying too much, and prevent their breaking, and then they put them up in little Bags, of fifty, a hundred, or a hundred and fifty, to bring them hither. Nevertheless, there are some who value their Gain more than their Conscience, who let them hang upon the Stalks 'till over-ripe, and receive from them a black fragrant Balsam, that flows 'till the essential Parts of the *Vanilla* are exhausted, and it can run no more; and then they gather the Pods, and pack them up for Sale, as aforesaid.

The great Lords of *Mexico* are mighty Lovers of these Plants, as well because of the pleasant Smell of their Fruit, as they mix it plentifully in their *Chololate*, as because of the great Profit they yield them in Trade. The *Spaniards* bring us this rich Commodity, and give it the Name of *Vanilla*, which signifies a Sheath, because the Pod resembles the Figure of a Sheath. It is of a pleasant Taste and Smell. Chuse such as are well fed, thick, long, new, heavy, not wrinkled, or rubb'd with Balsam, and which have not been kept moist, but are of a good Smell; and beware of those that are small and dry, and of little Smell; the Seed which is very little, is black and shining. The *Vanilla's* are much used in *France* for making up *Chocolate*, and sometimes



17
The Tree of Acarous
Fruit of
Acarous



18
The Plant of Anacardium
Anacardium P. l.



20
Injubs.



21
Sebesten or Indian Plum

to perfume Sauff. Some say they are good to strengthen the Stomach. As to the Balsam, the Spaniards keep that, for we have none of it brought to us.

Vanilla, ex. Vanilla, is a Pod, of Lemery. about half a Foot long, and the Thickness of a Child's Finger, taper at both Ends, of a dark Colour, a pleasant balsamick Taste and Smell; a little acid, containing very small, black, shining Seeds. This Pod is the Fruit of a kind of *Verbena*, or a Plant of four or five Foot high, which the Spaniards call *Campeche*. It rises like a Creeper, and winds about the neighbouring or adjacent Trees, upon Poles, or climbs upon Walls. The Leaves resemble those of Plantane, but they are larger and more fleshy. The Flowers are blackish. This Plant grows in Mexico, where the Indians call it *Tlixchitl*, and the Pod *Macasuthill*.

Chuse such *Vanillas* as have the longest Pods, pretty thick and heavy, well fed, of a good Taste and pleasant Smell. It yields a great deal of Oil and volatile Salt; is cordial, cephalick, stomachick, carminative, aperitive. It attenuates viscous Humours, provokes Urine, and Womens Courses; is mix'd in Chocolate, and makes it agreeable both to the Taste and Smell.

[The *Vanellous* are the Pods of the *Volubilis filiginea Mexicana folis plantaginis*, R. Hist. V. 2. p. 1330. The Plant grows in New Spain, and other hot Countries; the Pod is flat, and contains a Multitude of small Seeds. Its principal Use with us is as an Ingredient in Chocolate.]

17. Of the Acajou.

Pomet. THE *Acajou*, or *Cashew Nuts*, or *West-Indian Anacardium*, are the

Fruit, or rather the Seeds of a yellow Fruit, inclining to red, of the Size of a *Magdalen* Pear, or an Orange. The Tree which bears these is, according to the *Sieur Roussin's Letter*, five or six Foot high, adorn'd with Leaves of a yellowish Green, and something of the Shape of the Ivy. The Flowers are small, and grow in Tufts, of a Carnation Colour, from whence comes a yellow Fruit, as said before; at the Bottom of which are placed the Seed, of the Bigness of a Chestnut, of the Shape of a Kidney, and of an Olive-Colour, and consisting of a white Kernel cover'd with a tough Skin; which, after it has been roasted, like a Chestnut in the Fire, is pleasant to eat. There is contain'd besides the Kernel of these *Acajous*, a black caustick Oil, which is a good Remedy to cure Corns upon the Feet, and take away red Spots in the Face.

The Americans cut the yellow Fruit in Slices, and eat it with Sugar, as we do a Lemon; as well to revive the Spirits as to cool them; they are full of a well-tasted Juice. Chuse such *Acajous* as are large and new, of an Olive-Colour, with white Kernels, which are certain Signs they are fresh, and not of a Chestnut Colour, which is a Token of their Age and over Ripeness.

[The *Cashew Nut* is the Seed of the Fruit of the *Anacardus Zeylanica folis nupis Juglandis*, Hern. Mus. Zeyl. p. 55. It hangs to the Bottom of the Fruit.

The Juice of the outer Rind is of some Use to take away Freckles, and the Kernel is eatable; but it is very little known as a Medicine.]

18. Of Anacardiums.

THE *Anacardium* is a Kind of a Fruit, brought from the *East-Pomet. Indies*; the Tree which bears it has greenish Leaves, that are roundish; after which come Pods, of the Size of the large Bean, in which are usually inclosed two *Anacardiums*; which, when half ripe, are of the Colour of bunt Coffee; but when full ripe, they are of a shining Black. Chuse such as are large, well fed, new, dry, and have in them a white Kernel. They pretend that the green Fruit of these are a dangerous Poison, but otherwise when dry: After they are prepar'd in Vinegar, they become a good Purgative; but nevertheless they ought not to be meddled with, without the Advice of an able Physician. They yield an Oil like the *Cashew Nut*, which has the same Virtues.

Anacardium is a Kind of large Fruit, like the Chestnut, being in some Measure of the Shape of a Bird's Heart, whence it derives its Name: It is of a shining, black Colour, containing in it a white Kernel. This Fruit grows on a Tree in the *Indies*, whose Leaves are almost round, and the Fruit in Pods, of the Size of a *Windsor Bean*; holding each, not above two *Anacardiums*, which afford Oil, and are sold in great Plenty; they rarify and purge the pituitous Humours; are resolving; refresh the Brain, and strengthen the Memory, being taken in Decoction.

[These are the Fruit of the *Arbor Indica fructu conoide, Cortice pubescente, nucleum unicum, nullo officulo tectum Claudente*, R. Hist. V. 2. p. 1566. It is a warm cordial Medicine, but is very little taken Notice of in the present Practice, and rarely to be met in our Shops.

19. Of Jububs.

Pomet. **T**HE *Jububs* are the Fruit of a Tree which grows commonly in *Provence*, but chiefly in the Gardens of *Hyeres*, near *Toulon*, where it is in such great Quantities, that almost all we sell comes thence by the Way of *Marseilles*: The Tree that bears them is of a moderate Height, and the Leaves are greenish, thin and fibrous; after which comes Fruit, of the Bigness of one's Thumb End; green at first, and something reddish as they ripen.

Chuse your *Jububs* fresh, large, well fed and fleshy, of a good Kind, that have been well dry'd, that they may keep without Danger of rotting; and take Care that they be not kept in Places too moist, or gather'd when they are too ripe, for that is the Way to lose them all: They taste, when gather'd, and rightly manag'd, like Raisins of the Sun, with one Stone, like a Prune Stone, in the Middle. *Dodonæus* saith, they are of two Sorts, *viz.* the Red and White; and the Red are of three Kinds, to wit, *Jububa major*, *Jububa minor*, and *Jububa Agrestis*; the first, which grew originally in *Africk* and *Egypt*, and were thence transplanted into *Italy*, *France*, &c. are those which we chiefly use, being moderately hot and moist. This Plum is an excellent Pectoral, and opens the Body, temperating the Sharpness of the Blood and Humours; it expectorates tough Flegm, and is good against Coughs, Colds, Hoarseness, Shortness of Breath, Wheezings, Roughness in the Throat and Wind-Pipe, Pleurisies, Heat of Blood, Exulceration, or Excoriation of the Kidneys and Bladder, cleansing them; and by their mucilaginous Quality, making the Passages slippery: They are used, in a Decoction, for Stone, Gravel, &c. or for opening Obstructions in the Liver, Spleen, Dropsy and Jaundice, by Urine.

Jububa, or *Zizipha*, a large Fruit of *Lemery*. the *Ziziph* Tree, is like a moderate siz'd Prune or Plum, oblong or oval, red without, yellow within, fleshy and tender, of a sweet and vinous Taste, having a tough Skin, and a hard, strong Kernel: The Fruit grows upon a Tree call'd *Ziziphus*, by *Tournefort*, and wants little of the Plum-Tree in every Respect; but is crooked, cover'd with a rough uneven Bark, that cracks or splits: The Branches are hard, furnish'd with strong Thorns; the Leaves oblong, something hard, terminating in a blunt Point, of a fine, thinning, green Colour, slightly indented on their Sides; the Flowers growing among the Leaves, being ty'd by short

Stalks, each of which, according to Mr. *Tournefort*, is commonly compos'd of five Leaves, like a small Rose, which is placed in the Middle of the Cup, of a grassy or pale Colour: When the Flowers are gone, the Fruit, or *Jububs*, succeed; being green at first, and reddish as they ripen. This Tree grows in the hot Countries, and is very common in *Provence*, and in the Isles of *Hyeres*, near *Toulon*, from whence the dry'd Fruit are brought. They are pectoral and aperitive, being usually employ'd in *Ptisians* for Diseases of the Breast; they sweeten the Sharpness of the Humours, by their sweet and glutinous Substance, and provoke Spitting.

[The *Jububs* are the Fruit of the *Jubube arabum*, *sive Zizyphus Dodonæi*, Ger. 1318.

They are esteem'd warm and moistening, and are recommended in Stranguries, &c. but are at present little used.]

20. Of Sebestens.

Pomet. **S***ebestens* are a blackish Fruit, that are brought by the Way of *Marseilles*, from the *Levant*, &c. The Tree that bears this Fruit is about the Height of our common Plum-Trees; the Leaves green, and almost like them, but that they are a little rounder: The Flowers are whitish, in Form of a Star, from whence comes the Fruit, about the Size of one's Finger's End; it hangs to the Branch by a little white Cup, as it is brought to us.

Chuse your *Sebestens* fresh, plump, moist, and full of Pulp, of a black brown Colour outwardly, adorn'd with white Caps, which is an essential Sign of their Newness, and such as have neither been wash'd nor rubb'd; the sweet, viscous, and fleshy; therefore reject such as are otherwise, and whose Caps are gone, which is a Token they have been wash'd or rubb'd; and also take Care not to chuse those that are hard, small, and of a reddish Colour.

The Way of using the *Sebestens* is much the same as that of the *Jububs*, and their Virtues alike, so that one is frequently used for the other. The *Egyptians* make a gluey Sort of Birdlime of this Fruit, which is call'd *Alexandrian Birdlime*; but as this seldom comes amongst us, we use that which is made in several Parts of *France*, in *Normandy*, and about *Orleans*. This Birdlime is prepared from the Holly-Tree, steep'd in a Pond or Pit, and afterwards beat together in a Mortar, 'till it is reduced into a Paste, and then well work'd with the Hands, and wash'd in Water; it is put up in Barrels, to be sent to several Parts: The Choice of it is, to take such as is the greenest, the least stætid, and freest from Water that

that can be got; the Use of it being to catch Birds, and other Creatures of the like Nature.

Schröder says, the Plums of the *Sebesten-Tree* are small, with a three-corner'd Stone; temperate in respect of Heat, and moist, soften and prevent, or allay the Acrimony of Humours; are used chiefly in Defluxions of Rheum, Obstructions of the Belly, and quench Thirst. You may make a Decoction of them with Wine and Water, to move the Belly gently to Stool; or make an Electuary of them thus: Take *Sebestens* without the Stones, Prunes ston'd, Pulp of Tamarinds, of each five Ounces; Violet Water two Pints; Juice of the Herb Mercury, clarify'd, four Ounces; Sugar Penids half a Pound; of the four greater cold Seeds, blanch'd, of each two Ounces; Diagridium three Drams: Boil the *Sebestens*, Prunes and Tamarinds, in the distill'd Water, which being dissolv'd, mix with the Juices; then add the Penids and Pulp of Prunes, which being dissolved also, mix the Diagridium and make an Electuary. It purges, and carries off the Sharpness of Humours, and provokes to Urine.

Sebestena, or *Prunus Sebesten*, is a *Lemery*. Fruit of the Size of a small Acorn, that is oblong, roundish and black, wrinkled as a little Prune, of a sweetish, viscous, or clammy Taste, cover'd at the upper End with a small woody Cap, of a whitish Grey. The Fruit grows upon a Tree of the same Name, resembling the Plum-Tree, only that the Leaves are a little more indented; the Flowers are small, white, and like those of the *Geranium*. This Tree grows in *Syria*, *Egypt*, &c. Make choice of your Fruit according to the Directions given by *Pomet*; they contain in them much Oil, and some essential Salt; are moistening, emolient, sweetening, pectoral, and serve to open the Breast, cleanse the Reins, provoke Spittle, and relax the Bowels.

[*Sebestens* are the Fruit of the *Myxois Domestica*. J. B. 1. 198. *Prunus Sebestina Domestica*. Jons. Dendr. p. 85.

The Tree is common wild in *Egypt* and *Asia*. The Fruit is emolient, and recommended to blunt the Acrimony of the Humours; but is very little now in Use.]

21. Of Dates.

THERE are three Sorts* of *Dates* *Pomet*. which we sell; the best are those which grow in the Kingdom of *Tunis*. There are some that come from *Sally* in *Africa*; but they are lean and dry, and differ much from those of *Tunis*, which are fat and fleshy. We have others that are brought from *Provence*, which

sell well, being large, fleshy, fair without, and white within; but these are very subject to damage in keeping. The Tree that bears this Fruit is the Palm, which is so well known throughout the whole World, it would be unnecessary to describe it.

Chuse such *Dates* as are large, full and fleshy, of a golden, yellow Colour without, and white within; the Taste sweet and pleasant; let the Pulp be firm, white about the Stone, and reddish towards the Bark; of a *Malaga* Wine-like Taste, and such as, being shaken, make no Noise: If they are small, hard, without Pulp, or rattle, they are naught: Those of *Tunis* are worth much more than those of *Sally* or *Provence*, as observ'd before. *Dates* are so common, in some Parts of the World, that they serve for the daily Subsistence of more than an hundred Millions of Souls; but for medicinal Uses, they are not much employ'd, saving in the *Diaphanicon*, some pectoral Pifans, with *Sebestens* and *Fujubs*, &c. besides which, they are frequently eat as other Fruit.

Dactyli, or *Fruetus Palmæ*, the *Dates*, are an oblong, roundish Fruit, *Lemery*. a little larger than one's Thumb, fleshy, of a yellowish Colour, sweet and agreeable to the Palate, being closed in a long, round, strong, hard Nut, of an ash-colour'd Grey, cover'd with a little, thin, white Skin: They are brought chiefly from *Tunis* in *Barbary*; where they grow upon a large Tree, called *Palma Major*, or *Palma Dactylifera*, whose Trunk is large, round, streight, high, cover'd with a thick Bark, rising all the Way, with several scaly Knots, which make it advantageous to climb; the Leaves only grow at the Top longwise, pointed as those of the Flower-de-Lis, spring, and opposite one to the other, about four Foot long, and as thick as one's little Finger; triangular, hollow, spongy, and bending Archwise; the Flowers are white, and grow together on a Cluster, like a Bunch of Grapes, and are succeeded by the *Dates*; which, when ripe, serve for the Food, or Supply, of vast Numbers of People in the *Indies*, *Syria*, *Africa* and *Egypt*; but what are brought hither, serve only for physical Uses, being deterfive and something astringent; they allay the Acrimony of the Stomach, strengthen the *Factus* in the Womb, moderate the Scouring of the Guts, and are cooling in inflammatory Fevers: They are reckon'd peculiarly serviceable to destroy all tartarous Mucilage, and other gross Humours, that breed the Stone, Gout, and Rheumatism.

[*Dates* are the Fruit of the *Palma vulgaris*, Park. 1543. *Palma major*, C. B. Pin. 506. *Palma Dactylifera major vulgo*, Hern. Par. Bat. Pr. 366. It is common in *Egypt*, and other hot Countries.

Countries. Before the Fruit is ripe it is something astringent, but when thoroughly mature it is of the Nature of the Fig, and sometimes used in Cataplasms, as Figs are; but they are seldom seen in Prescriptions at present.]

22. Of Palm Oil.

Palm Oil, or Oil of *Palme*, is a thick, unctuous Liquor, as the name imports, of a gold-colour'd Lustre, and a Violet or Orrice Smell, especially when new and right. This Oil is made by the Expression from the Kernel of *Palme*, which grows by Clusters, of the Size of an Egg. The Tree which produces this, is a Sort of Palm, which is common in *Africa*, especially at *Senegal*, and in *Brazil*. The *Africans* make this Oil in the same Manner as they make Oil of Bay-Berries at *Caluiffon* in *Languedoc*; and it serves them to eat, as we do Butter: As to that which is old made, they burn it in Lamps.

Chuse your *Palm Oil* fresh and new, of a good Smell, and sweet Taste; so that it be as pleasant and grateful as the best fresh Butter we have, and of the highest Colour you can get. The white Colour it acquires by Age, has made some People fancy that the *Palm Oil* is white; Take care you do not buy such as is compounded of Wax, Oil Olive, Orrice, Saffron, and Camerick, as it happens to some, who mix with others the Seller's Hands; but the true *Palm Oil* is white, as it is exposed to the Air, which the *Others* do not do; besides, the true *Palm Oil* is of a golden Colour, in course of Time, and never becomes white, by standing in the Air, which happens not to the *Others*. They use this Oil to ease the Cough, and the Humours.

[The *Palm Oil* is made from the Fruit of the *Palma Guineensis*, L. 1. 369. *Palma*, *Dactylifera et vinifera Guineensis*, Jonsl. Dendr. 139. It grows plentifully wild in *Guinea*. The Oil is good as a Liment in Rheumatisms and Palsies, and to strengthen the Nerves.]

23. Of Cokar Nuts.

THESE are Fruits of various Sizes and Shapes, as represented in the Figures of them, which are engrav'd from the Originals which I have in my Hands. They are proper for several Sorts of Works; as Bowls, Beads, Snuff-Bowls, &c. The Place in *Europe*, where they trade most in these Kind of Fruit, is at *Diocpe*. I shall not here describe the

Trees which bear them, but shall only say, that they are different Sorts of Palm Trees; but as so many Authors have treated of them, I shall add nothing more. The middle *Guinea* *Cocos*, which are the *Amill Islands*, make a considerable Trade, and furnish the Workmen with considerable Profits, that deal in *Beads* and *Snuff-Bowls*. Every Sort is of such vast Use in *Africa*, and several other Parts of the World, that it is difficult by Means of it only, to supply the many Necessaries of Life; which I shall not go into a Detail of, it would swell this Volume to too great a Bulk. There is another Sort, but much more scarce, which *J. Bauhin* calls *Nux Indica ad Venena celebrata*; *five* *Indica*; the *Indian Nut*, famous against the *Maldive Nut*. I have one of these, which differs from the common Kind, in that it is more long shap'd, and pointed, and has a browner Shell. The high Virtue ascrib'd to this, is the Reason why it is so scarce and rare.

The *Cokar-Nut* is plentifully found in the *Spanish West-Indies*; *New Spain*, *Lanery*, *Sanchez*, *Bay of Mexico*, *Cuba*, *Havana*, *Guatemala*, &c. as well as in the *East-Indies*. The Tree ascends direct and high, having on its Top a Tuft of Palm-like Branches, of a most beautiful Figure, bringing forth monthly Clusters of very large Nuts, containing within a very hard Shell, which eats as pleasant as an Almond, with a milky Juice, which is drank to quench Thirst.

The Kernel is covered with a very hard Shell, of which the Turners make Vessels and drinking Cups; some so large as to hold a Quart, three Pints, or more; and the Shell is cover'd with a thick Rind, which being beat, becomes hard like *Flax* or *Hemp*, of which Cloathing is made, Cords, Ropes, and the like; so that the *Cokar-Nut Tree* seems to be well provided with all Necessaries for human Life; as Cloathing, Vessels of Use, Meat, Drink, &c. The milky Water, within the Nut, is pleasant, both to quench Thirst, and also to nourish the Body; and by the Heat of Fire it will thicken into a Jelly, like a Custard made of Cow's Milk; and 'twice it is an excellent pleating Liquor, cooling, moistening, and sweetening the Juices; for which Reason it is said to be good against Consumptions and Hectick Fevers, abating all preternatural, and irregular Heats. The Branches of the Trees being cut, yield a pleasant Liquor, which being distill'd, gives a strong *Aqua*; The Kernel, besides its serving for Meat, yields by Expression an Oil, which is better than any Oil Olive, not inferior to the best Oil of Sweet Almonds. Of the Branches they make Houses; of the Trunk their Boats and Ships; of the

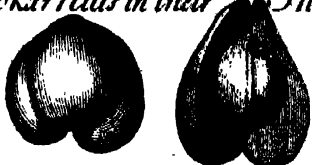
22



24.

The Palm bearing Dates.

Large Cokar Nuts in their Shells.



23



The Palm fruit of which Palm oil is made.



25

Nux Vomica.

The Tree bearing the Coco.

Long Cokar.

Palm fruit of the Isle of Ceylon.



Cokar Nuts of diverse sizes without their Shells.

The Maldive Nut.

26



Levant Nut

the coarse Hards, on the Outfides, their Cables; and of the finer Stuff, Sails for Ships, and Cloth, as aforesaid.

[The common *Coco* or *Cocker Nut* is the Fruit of the *Palma Indica ancifera Coccys diaga*, R. Hist. 2. 1356. *Palma frus nux Indica vulgaris ferus Coccus*, Park. 1596. This grows both in the *East* and *West Indies*.

The *Maldiva Nut* is the Fruit of the *Coccos de Maldiva frus nux Indica ad Ventum celebrata*, R. Hist. 2. 1359. *Palma Coccifera figura Ovati*, C. B. Pin. 509. This grows only in the *East Indies*, and has the Character of a very great Medicine in Palsies, Epilepsies, &c. besides its Virtues in resisting Poisons, but is little us'd at present.]

24. Of the Vomiting-Nuts.

THE Vomiting-Nuts are round flat *Pomet*. Nuts, of the Size and Shape represented in the Figure; they are of a greyish Colour on the Outfide, and being slit in two, are of divers Colours, as yellow, white, brown, &c. within. These Nuts, according to the Relation of some Persons, are the Kernel of a Fruit of the Size of our Rennet Apples, which grow upon a large Plant in several Parts of *Egypt*, from whence come the Vomiting-Nuts we now sell. The best Relation we have of the Growth of them, as well as their Description, is given by Mr. *Paul Hermans*, Physician and Botanist of *Leyden*, one of the most able Men of his Age. This Relation of his has a great deal of Analogy with what I have said of them, except that he says they grow in the Isle of *Ceylon*, which may be, and yet they may also grow in *Egypt*, for every Body knows the same Fruit may grow in several different Places. He says likewise, that there is another Sort of *Nux Vomica*, which comes from the Isle of *Timor*, and that the Fruit is four Times smaller than that of *Ceylon*; and that the Plant is called *Lignum Colubrinum*.

They are brought from *Egypt*, the *Levant*, and *East-India*, and are generally flat, round, and of the Thickness of a Crown Piece, almost like Lupins, but larger, hollowish on the one Side, and a little bunch'd round on the contrary; of a greyish Colour, with a Kind of Freeze, or soft Cotton, covering the whole; but of so hard and horny a Substance, that it cannot easily be beaten into Powder, but must be grated, or ground in a Horse-Mill: The chief Use of them is to insatuate Birds, as Crows, Ravens, Pigeons, &c. It is said it will kill Dogs, Cats, and other Creatures, if it be given mix'd with their Meat: And it is probable, that if it kills not such Creatures as Wolves, Foxes, Tygers, &c. yet pos-

sibly it may so stupify them, that they may the more easily be master'd and kill'd by Mankind: It is also mix'd with PASTE, and given in a Bait to catch Fish withal. It has been given inwardly, to three or four Grains, for several Intentions, but is much better let alone, since there are so many Remedies that may be used with less Danger.

Nux Vomica is a little flat Fruit, as round as a Farthing, downy or lanuginous, of a greyish Colour, hard as Horn, of various Colours within, sometimes yellow, sometimes white, and sometimes brown: Some People believe this to be the Kernel of a Fruit as large as an Apple, that grows upon a great Plant in several Parts of *Egypt*; but the Truth is, no Body as yet truly knows the Origin of the Vomiting-Nut, and there is nothing to be depended on in the Histories concerning it. Chuse such as is large, clean and new; it is employed chiefly for intoxicating of Birds and Fish, though it is not poisonous if given to Men, but may be used in small Quantities; and is reckon'd deterfiv, drying, resolute, being applied externally and internally: It is commended as useful to resist Poison, and drive away Melancholy and Vapours by Perspiration.

[The *Nux Vomica* is the Seed of the *Nux Vomica major et Offinarum*. Par. Bat. Prodr. 357. *Malus malabarica fructu cortice Amaricante semina plano compresso*. R. Hist. 1661. *Solanum aboreum indicum maximum foliis Aenopliae frus Napææ majoribus fructu rotundo*. Breyn. Prodr. 2. 92.

The *Lignum Colubrinum* is the Root of a smaller Species of this Plant, as mention'd before in its proper Place.

It is probable that the *Nux Vomica* becomes a Poison by its extreme Bitterness, which must make an insupportable Impression upon the nervous System, as we find all bitter Drugs are poisonous to some Kinds of Animals, and even Bitter Almonds to Birds.]

25. Of the Coccus Indus, or Levant Nut or Berry.

THE Berries which we sell by the Name of the *Levant*, or *Eastern Pomet Berry*, are a small Fruit, of the Size of a good large Bead, roundish, and something of the Shape of a Kidney, as you will see represented in the Figure. They are of a reddish Colour, and hang to the Plant which bears them, by a little Stalk of the same Colour. In these Fruits is found a little Kernel, which is divided into several

veral Parts, very subject to be worm-eaten, and the greatest Part of these Fruits come to us, for that Reason, empty; therefore chuse those that are heavy, fresh, the highest colour'd, largest, and least fill'd with Dirt that may be; they are serviceable to destroy Vermin, being usually mix'd with Stavesacre. Some Authors also say, that they will intoxicate Fish, so that they may be easily taken.

There is another Fruit call'd the *Fagara* of *Avicenna*, which is almost like the *Levant Berry*, or *Coculus Indus*, and whose Figure is shewn with that of the *Date*, of which there are two Sorts. The first is so like the *Coculus Indus*, that if it were not for a thin greenish Covering that it has, it wou'd be hard to distinguish them. The second is of the Figure and Size of a *Cubeb*, of a brown Colour, and aromatick Smell, and the Taste a little bitter and piquant; both partake of the Nature of the *Cubebs*, being good to strengthen the Stomach, assist Digestion, and expel Poison.

Some Authors call the *Levant Nut*, or the *Coculus Indus*, the *Bacca Orientales*; they are Berries brought from the *East-Indies*, as also from *Turky*; round, and a little larger than Bay-Berries, hollow within, and of a brownish Colour, or rather blackish-ash Colour on the Outside, having a white Kernel within, and of a hot Taste, drawing Water into the Mouth; and as is reported, grow many together like Ivy-Berries, yet each by itself on a Stalk. Some will have them to grow on a Kind of Night-Shade, others on a Kind of *Tribunal* or *Sourget*; but the Truth is scarcely yet known: They are chiefly used for Baits to catch Fish withal, or in a Powder to kill Lice and Vermin in Children's Heads.

[The *Cocculus Indus* is the Fruit of the *Salanum acemosum Indicum arborescens*, *Cocculus Indus Ferens*. R. Hist. 125. *Arbor india Cocculus indicus Ferens*. Breyn. Prodr. 2. 29. It is common in Malabar. Four Grains of this Fruit taken inwardly cause Hick-ups, Nausea's and Faintings, and a large Dose is poisonous. The Powder mix'd with Flour and New Cheese, intoxicate Fish so, that they may be taken with the Hand. Some People are afraid of eating such Fish; but Experience has prov'd that their Apprehensions are without Foundation.

The *Fagara* is the *Cubebii Affinis Fagara major*. C. B. Pin. 412. *Fagara seu Caryotona Lucida*. Com. Syll. 74. These are brought to us from the *Philippine-Islands*; but seldom used in Medicine.]

26. Of Cassia.

WE have four Kinds of Cassia, 1. That of the *Levant* 2. That of *Egypt*. 3. That of *Brazil*, and

4. The *Island Cassia*: They are all the Fruits or Pods of different Species of the same Tree, which have Leaves some longer some shorter, and yellow Flowers. The first, and most esteem'd is that of the *Levant*. This *Cassia* grows plentifully in several Parts thereof, from whence it is now brought by the Way of *Marseilles*. The Leaves of this are green, and the Flowers yellow.

Chuse this *Cassia* fresh, in thick Pieces, that are heavy, not hollow, of a brown Colour, whose Bark appears fine and white within, and such as is furnish'd with a black Pulp, and a white hard Stone or Kernel, the Shape of a Heart. This Pulp ought to be without being either sharp or musty, and such as will easily separate from the Pod; Beware that the Pods be not knotty or crooked, but even, and such as will not shake or rattle. Some will have it, that the true Way of distinguishing the *Levant Cassia*, is by a Ridge that runs the Lengthway of the Pods; which nevertheless is no general Rule, because there are Pods with this Mark frequently met with in the *Antilles*, to the *Eastern-Islands*. The best Way is to take that of *Marseilles*, because there is none comes that Way but from the *Levant* and *Egypt*.

27. Of Egyptian Cassia.

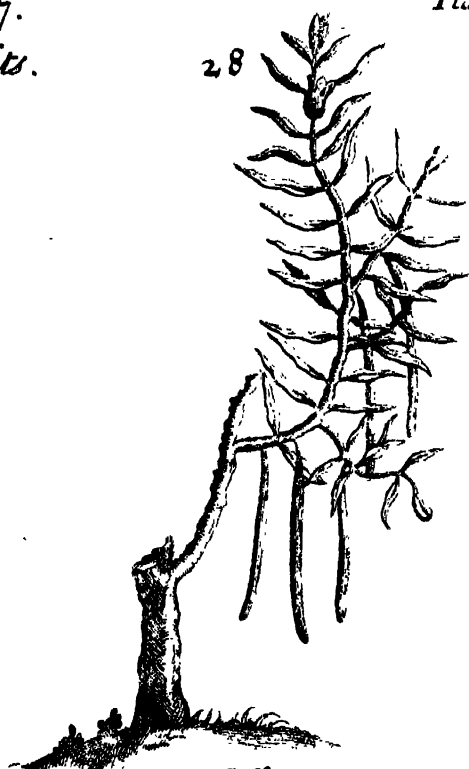
THE *Egyptian Cassia* is a Fruit like the former, only that it is thinner, and a great deal tenderer. The Tree that bears this *Cassia* grows to a prodigious Size; it is as large as any Tree we have in *France*, and differs not from the former but as the Leaves are much smaller. They meet with such vast Quantities of these Trees throughout *Egypt*, that the *Cassia* they produce goes for almost nothing there, especially at *Grand Cairo*. The *Egyptian Cassia* should be chosen as that of the *Levant*; it shou'd be such as will break under the Thumb in cleaning. The *Levantine* and *Egyptians* make a Confection of the *Cassia*, while fresh, which they keep to loosen the Belly, it being a Medicine very convenient, and easy to take. The *Cassia* Confect ought to be new, and neither signs for musty. Some People use it here, in Imitation of the People of the *Levant*, to keep the Body open.

28. Of Brazil Cassia.

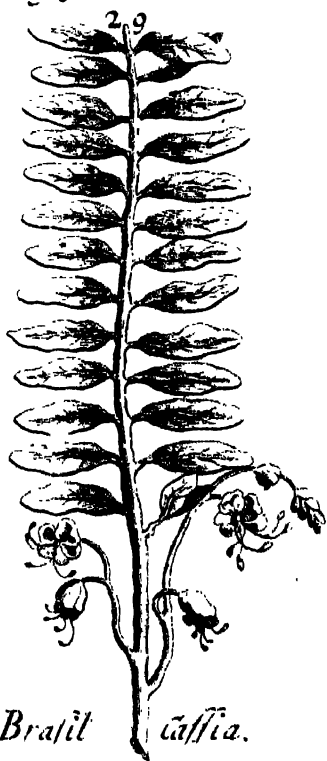
THIS grows in *Brazil*, on Trees whose Leaves, Flowers, and Fruit, are as in the Figure represented. The *Cassia* which these Trees produce is so large, that if I had not seen a Piece in M. *Tournefort's* Hands of about a Foot and a half long, and the Thickness of a Man's Wrist



Cassia of y Levant.



Egyptian Cassia



Brasil Cassia.



Cassia of y Islands.

Wrist, I cou'd not have believ'd that there was any *Cassia* so thick. But this Fruit is of little Use: But the *Cassia* we have the greatest Dealings in, is that we have from the *American Islands*.

29. Of the Island *Cassia*.

THE *Cassia* of the Isles is that which at present is most used, and is a Fruit of the same Nature with the former; all the Difference is according to the Places where it grows. The *Antilles* are so full of these Trees, that the *Cassia* of those Parts costs them nothing but the Trouble of gathering. It is the Profit or Perquisite of the Seamen who gather it, and stow it at the Bottom of the Ship and amongst other Goods; which is the Reason why it oftentimes comes so dirty, being full of Sugar and Filth that it gathers from the other Ladings in the Ship: Chuse such as comes nearest to the Fineness and Goodness of the *Levant Cassia* that you can get.

Schroder says, that which comes from *Brazil* purges more in one Ounce, than that from *Egypt* in two; yet that brought from the *East-Indies* and by the *Levant*, is accounted the best. That from the *West-Indies* is generally large and thick rinded, and not so pulpy, and therefore worth much less than the *East-India*. The Pulp gently loosens the Belly, and brings forth the Excrements without griping; it is temperate in respect of Heat or Cold, and moderately moist. It is good for such as are troubled with Fevers, the Pleurisy, or any Inflammation of the Liver or Spleen, being mix'd with Water, and Drinks of a cooling Nature. It is good to cleanse the Reins and Ureters, to bring forth Gravel and Stone, if drank in a Decoction of Cicors, Parsley-Roots and Liquorice. It is extracted by forcing the Pulp, taken out of the Cane, through a Sieve, under which is a Vessel of hot Water, that by the Help of the Vapours, the Pulp being stirr'd about in the Sieve, may the easier pass thorough, when hot; you ought to extract it but just at the Time of using, because it grows sour with keeping. There are several compound Extracts of it, according to the Nature of the Occasion.

Cassia fistula Alexandrina, *frus purgans*, *Lemery*. or *Canna fistula*, is a Pod, the Length usually of a Man's Arm, thicker than one's Thumb, and almost round or cylindrick, woody, of a blackish Colour. The Bark is as hard as Wood, composed of two Parts, equally join'd together, which cannot be separated but by breaking their Junctures. The Hollows or Cells are divided by thin Partitions, but very hard ones; and are fill'd with a Pulp or Substance like

Marrow, that is liquid, black, and as sweet as Sugar. Each of these Cells contains a thick Seed, like a little Pea, flat, and almost round, of a yellow Colour. This Pod is the Fruit of a large thick Tree which grows in *Egypt*, the *Indies* and several other Parts of the World; the green Leaves much resemble those of the Walnut-tree; the Flowers grow in Numbers upon one Stalk, composed each of five Leaves, disposed in a Circle, of a yellow Colour.

When the Flowers are fallen, the *Cassia* Sticks grow out and harden themselves, so that they break one against the other, when the Wind is strong, and make such a Noise, that they may be heard two Leagues round. The best *Cassia* is that which comes from the *Levant*; but it is so dear and scarce in *France*, especially in War-time, that we are obliged to make use commonly of such as comes from *Egypt* and the *Antilles*; that of the *Levant* and *Egypt* is brought to us by the Way of *Marseilles*, but the others by *Dirppe*, *Rochelle*, &c.

[It is to the *Arabians* we owe the Knowledge of this Medicine; for neither the *Greeks* nor *Romans* knew any Thing of it. The Tree which produces it is the *Cassia fistula vulgaris flore luteo*. Breyn. Prodr. 2. 26. *Arbor Cassiam solutivam ferens*. Bont. 101. It is common as well in *Egypt* as in both the *East* and *West-Indies*.

The *Alexandrian Cassia* is the best, but is very scarce: What we use now is the *American*, which is more acrid and griping than the *Alexandrian*; not that it is the Fruit of a different Tree, for the Tree that produces *Cassia* is the same in all Places; but the different Degrees of Heat make a Difference in the Fruit, for the Trees that now flourish in *America*, were first transplanted from the *Levant*, which is a Proof of the Truth of this.

The *Brazil Cassia* is astringent while green, but purges twice as strongly as any other Kind when ripe. The great Value of *Cassia* is, that it is a proper Purge in all Inflammatory Cases, which cannot be said of any other known Cathartick.]

•30. Of Tamarinds.

Tamarinds are a sharp acrid Fruit, which are brought from the *Levant*, *Pomet*. sometimes in Bunches, but more commonly freed from their Stalks. The Tree which bears them has very small Leaves; after which come white Flowers, almost like Orange Flowers, from whence arise Husks that are green at first, and grow brown as they ripen, when the Inhabitants

cents of those Parts gather them in Clusters, and
dry them a little before they are sent farther.

These your *Tamarinds* fat or oily, green, of a black, and a sharp pleasant Taste, and (notwithstanding they have not been kept in a Cellar, which may be proved by their too great Moisture, their Smell, and their Root, and their Kernel being soft) are much used in the adulterated and Malicious Sugar and Syrrap. They are much used in Medicine because of their cooling purgative Quality, and are contained in many Official Compounds.

There grow a great many *Tamarind* Trees in *Senega*, where the Negroes make the Fruit into Cakes, after they have stoned them and freed them from their little Stalks, which they make frequent use of to quench their Thirst. These *Tamarind* Cakes are very scarce in *France*. They cleanse *Tamarinds* like *Cassia*, and with Sugar make a Confection of them, which is a unpleasant.

Tamarindi, or *Oxyphœnica*, is a Fruit
Lemma. about the Length of one's Finger, as
 broad and thick as the Thumb, covered
 with a green Bark at the beginning, but that
 grows brown as it ripens, and is so tender that
 it easily falls off or separates. The Fruit affords
 a black, fourth, or sharp Pulp, that is grateful
 to the Taste; it hangs by long Fibres, or woody
 Strings, formed in the Nature of a Bunch. They
 take this Pulp from the Seeds as they do that of
Cassa.

The Tree which bears the Tamarinds is call'd *Tamarindus*, by Gerard, Parkinson, Bauhinus and Ray; of *Siliqua striata, quæ Tamarindus*; or *Balam Pulli, seu Maram Pulli*. It is as big as an Ash or Cherry-Tree. The Trunk is large, cover'd with a thick Ash-colour'd Bark. The Wood is hard, the Branches furnish'd with a great many Leaves, like those of Fern, long as one's Hand, compos'd of several small Leaves, ranged on each Side, hard, nervous, or stringy, green, &c. of a pleasant Taste. The Flowers spring from the Joints of Leaves join'd eight or ten together, like those of the Orange; white-colour'd, strip'd with red Veins. The Roots, are long, large and red. This Tree grows in several Parts of *India*, as *Cambaya, Senega, &c.* The Leaves are proper for quenching Thirst, and cooling the burning Fevers, being taken in Decoction.

The *Indians* separate the *Tamarinds* from the Bark and the Bunch, after having dried them a little, we have them frequently among us being used as a medicine. Chuse the newest, that are hard as Balls, black, of a sharpish grateful Taste and very small. They yield a good deal of acid Salt. Oil and Gum; are detesive, gent-

ly laxative and astringent. They allay, by their Shapness, the violent Motion of the Humours, abate feverish Heat, cool, and quench Thirst. They are given in the Cholera, and Loosness, being taken in Decays, or with a little Oil, Slip may be made of them.

to two. It brings the appetite.

An Extract is made from the whole Plant, and
them in fair Water, which is taken up like
of an Egg, and is good for the Stomach after

to a duenna, and to a duenna to
half an Ounce, of the
Stomach and
Vessels; is
of the Spleen, salt and
St. Anthony's Fire, &c.

[*Tamarinds* are the Fruit of the *Tamarindus*, Rai. Hist. 2. p. 748. *Tamarindus* is the Prof-
peri Alpini. Breyn. Prodr. 51. The Tree
is common in *Arabia* and in the Indies.

What we use in Medicine is the *Black Pulp* taken out of the Pod of this Seed, which is somewhat like a *Bean*, and lies between two Shells, one of which is woody and the other membranous. We owe the Knowledge of this also to the *Arabians*; for neither the *Greeks* nor *Romans* know any thing of it. The Pulp is very properly mix'd with *Cassia* as a Purgé, and may be given alone as an Alternative. It is very proper to be mix'd in Juleps, &c. to quench Thirst in Fevers.

3rd Of Myrobalaas

7 *Malabaricus* are a Fruit of the, Signess of a
 Plum, which are brought to us dry from
 several Parts of the *East-Indies*. There are five
 Kinds of them; the *Citrine*, the *Indian*, the
Chelbick, the *Bellerick*, and the *Emblick*.

2. Of Citrine Myrobalans.

THE *Citrine*, or yellow *Myrobalan*,
are Fruit which grow in several Parts of the *Indies*, especially about *Matala* and *Goa*. When these Fruit are ripe they are of the Figure or Likeness of the *Mirabelle*, enclosing a Stone. The *Indians* candy this Fruit while green, as we do *Pears*, and they learn to loosen the Bowels. The *Portuguese* and *Dutch* bring us this Fruit thus candied for the same Purpose. The greatest Quantity is brought us dry, which the Apothecaries keep for medicinal Compositions, after the Stone is taken out. Chuse your *Citrine Myrobalan* of a reddish Yellow, long, well-set, heavy, and hard to break.



Tamarinds.



Citron Myrcabalans.



M. Indian.



Chebulick M.



Embllick M.



Bellerick M.

of an astringent disagreeable Taste; and beware of being impos'd upon by any of the other four Sorts, to wit, the *Indian*, *Chebulick*, *Embllick*, or *Bellerick*.

33. Of Indian Myrobalans.

THE *Indian Myrobalans* are a small long Fruit, of the Size of a Child's Finger End, black without and within, without Stone, and very hard, that are brought from the *East-Indies*, where they grow in great Quantities, and from whence they take their Name. The Tree which bears these has Leaves like a Willow, after which comes Fruit of the Size and Shape of a Spanish Olive, which are green at the Beginning, and grow browner as they ripen, and blacken in drying. As we have them now brought to us, they are hard, and black as Ebony. Chuse those that are well fed, dry, blackish, of a sharpish astringent Taste, and the heaviest you can get.

34. Of Chebulick Myrobalans.

THE *Chebulick Myrobalans*, or those call'd *Quebuli*, are a Fruit very like the *Citrine*, except that they are bigger, blacker and longer. The Tree which bears them is as high as an Apple-Tree, and has Leaves like the Peach, with Star-Flowers of a reddish Colour. These Sorts of Trees are met with about *Bengal*, where they grow without Culture. Chuse these *Myrobalans* fleshy, the least wrinkled and black that is possible, such as are resinous within, of a brown Colour, and such as have an astringent and bitterish Taste.

25. Of Bellerick Myrobalans.

THE *Bellerick Myrobalans* are a small Fruit of the Bigness of a Nutmeg, of a reddish Yellow without and yellowish within, in which is a Stone supply'd with a Kernel of no Virtue. The Tree which bears these is large, and has Leaves like those of the Bay-Tree. The Fruit is fasten'd to the Branches in Shape of little Gourds, of a yellow Colour. These ought to be chosen well fed and new, smooth, high colour'd, and of an astringent Taste.

36. Of the Emblick Myrobalans.

THE *Embllick Myrobalans* are a blackish rough Fruit, of the Bigness of Galls, easy to divide into Quarters; for which Reason almost all we have brought are after this Manner. The Trees that bear them are as high as the Palm, and the

Leaves are almost like the Fern. Chuse such as are least fill'd with Stones and other Trash, which they are very subject to; but, on the contrary, the most fleshy and blackest you can meet with. The *Indians* do not use the *Embllick Myrobalans*, either candied or raw, as the other four Kinds, except sometimes while they are unripe, for their Tartness; but they employ them to dye Skins green, as the Leather-dressers do *Sumach*, and also to make Ink. Some hold that all the *Myrobalans* grow upon one and the same Tree, which is far from Truth, as I have shewn; for, though they all grow in the *East-Indies*, some of them grow fifty Leagues from one another. The *Citrine Myrobalans*, which the *Indians* call *Avare*, purge Bile: The *Indian*, which those People call *Rezenuale*, and *Bellaris Gotin*, purge Melancholy: The *Embllick*, call'd *Annual* by the *Indians*, and the *Chebulick*, *Areca*, purge Flegm: Besides these five Species of *Myrobalans*, used sometimes in Pharmacy after the Stones are taken out, there is also a sixth Kind of *Myrobalan*, call'd *Disacque-Nut*, which resemble *Citrine Myrobalan* in Figure and Size, but is black. This Kind, however, is never brought to us.

Myrobalani, or *Myrobalanes*, are a Fruit the Thickness of a Prune, which *Lemery* are brought to us from *India* dry. There are five Kinds of them; the best call'd *Myrobalani Citrini*; the second *Myrobalani Indici*; the third, *Chebuli*; the fourth, *Embllici*; the fifth, *Bellerici*. The *Citrine*, or yellow Sort, are small, oblong or oval, of the Size of an Olive, or a little bigger, rais'd on several Sides, containing each a longish Stone. They grow upon a Tree resembling a Prune or Plum, but that bears Leaves like a Service-Tree. It grows without Management or Care in *India*, and particularly near *Goa*. This Kind of *Myrobalan* is the most used of all the Sorts in Physick. It ought to be chosen fleshy, heavy, hard, of a reddish yellow Colour, and an unpleasant astringent Taste.

Myrobalani Indici five nigri, five Damascii, the *Indian*, or black *Myrobalans*, are an oblong Fruit, of the Size of a small Acorn, rough and ridged lengthways, of four or five Sides, very hard, hollow within, and void of a Stone. They grow upon a Tree whose Leaves are like those of the Willow.

Myrobalani Chebuli, Quebuli, Chepuli, Cepuli, or *Chebulick Myrobalans*, are a Fruit like Dates, oblong and sharp, or pointed at the End which grows to the Tree, having five Corners or Ridges, of a yellowish brown Colour. They grow upon a large Tree like a Plum-Tree, in *India*, without Culture. The Leaves are like those of the Peach-Tree; the Flowers form'd Star-wise, of a Colour

lour tending to Red. Make choice of large, fleshy, hard *Chebule Myrobalans*, of a dark yellow Colour, and an astringent Taste, inclining to bitter.

Myrobalani Emblici, Embelgi, Emblegi, Ambegi, Dyseni, or *Emblick Myrobalans*, are a Fruit that are almost round, and about the Size of a Gall-Nut, rough on the Outside, and ridg'd on the six Sides, of a dark brown Colour, containing each a thick Nut, like a Filbert, rais'd on six Corners, of a yellow Colour. The Fruit grows upon a Tree of the Height of a Palm, having long Leaves cut small and indented like the Ferns; we have these brought to us cut in Quarters, separated from the Stone, and dried. You ought to chuse them clean, without Shells, blackish without, grey within; of an astringent Taste, attended with a little Sharpness. The *Indians* dye Skins and make Ink with them.

Myrobalani Bellerici, Bellerigi, Bellegu, or *Bellerick Myrobalans*, are Fruit of the Size of the common Sort, oval, or almost round, hard, yellow, more united, and less angular, or corner'd, than the others, containing each an oblong Stone, or Nut, as long as an Olive; the Stone encloses a little Kernel. The Tree that bears this has Leaves like the Bay, and is as big as a Plum-Tree. All these Sorts of Fruit yield a great deal of essential Salt and Oil, a moderate Quantity of Earth and Flegm: They are all gently purgative and astringent, something like *Rhubarb*; but the *Citrine* Kind are esteem'd more particularly for purging the bilious Humours; the *Indian* the Melancholy, and the others for the Serous and Flegmatick. They may be given from six Drams to double the Quantity, either in Pills, a Decoction in Wine, or an Extract made of the pulpy Part, by keeping them in Wine, then straining out the Infusion, and inspissating, or thickning, to a Consistence.

[Many have been of Opinion that the *Citrine* and *Chebule Myrobalans* were the same Fruit, only in different Degrees of Maturity, the *Citrine* being such as were gather'd before they were ripe, and the *Chebule* such as were suffer'd to remain on the Tree 'till perfectly mature: Others have thought all the Kinds to be produced by the same Tree; but the Truth certainly is, that they are the Fruit of five entirely different Trees.

The *Citrine* is the Fruit of the *Myrobalanifera Sorbi foliis*. *Jonst. Dendr.* 83.

The *Indian* is the Fruit of the *Myrobalanifera Salicis folio*. *Jonst. Dendr.* 82.

The *Chebule*, of the *Myrobalanifera Persicæ folio*. *Jonst. Dendr.* 83.

The *Bellerick*, of the *Myrobalanifera Lauri folio subcinereo*. *Jonst. Dendr.* 84.

And the *Emblick*, of the *Myrobalanifera foliis minutim incis.* *Jonst. Dendr.* 83. *Canna indica arborea Zanon. Myrobalanus Emblica foliis Securidacæ.* *Breyn. Prodr.* 2. 74.

The *Bengal Bean*, sometimes used in Medicine as an Astringent, is no other than the Fruit of the *Citrine Myrobalane*, hurt while young by the Puncture of an Insect, and growing by that Means of an uncommon Shape, as Plums, &c. will with us.]

37. Of the Areca.

THE *Areca* is supposed to be the Fruit of a Kind of Palm-Tree of *Pomet.* that Name. This Fruit is also call'd *Fansel*, the *East Indians* make a great deal of Use of it: It is of various Shapes, sometimes roundish, but flat at the End, sometimes oblong; and there is besides a Kind that is slender and black, very hard, and of an insipid Taste. They seldom send us the *Areca* with its outer Substance; and what we have of it is so hard, that if all Accounts did not assure us of it we could hardly conceive it could be eatable. The *Areca* is generally call'd *Mut*; it however is only a Kernel, commonly of the Shape of a Coat Button, but something more pointed, and is marbled within with black and white Veins like a Nutmeg. The Substance is so hard that it is like Horn.

The *Indians* make a Kind of Confect of the *Areca*, *Betel*, and Oyster-Shells burnt, which is in great Use among them. So many Authors have given the Preparation of this Mixture that I shall not repeat it here.

The Tree which bears the *Areca* is figur'd in the same Plate with the Peppers.

Areca Palma Species. Scelig. Areca five Fansel Clus. in Garz. Ludg. Palma Lemery. cujus fructus sessilis Fansel dicitur. Avellana Indica. The Palm, whose Fruit is call'd *Fansel*, or the *Indian Filbert*, is a Species of the Palm-Tree, very high and streight, that grows in *Malabar*, and several other Parts of *India*. The Flowers are small, white and almost without Smell; the Fruit is of an oval Figure, the Size of a Nut, having a green Bark, or Peel, at first, which becomes very yellow as it ripens, soft and very hairy. The Bark, or Rind, being taken away, there appears a Fruit the Size of a Filbert, sometimes half round, sometimes pyramidal; which being broken, resembles that of a Nutmeg in Fineness.

The Fruit which the *Indians* call *Chosool*, not being as yet half ripe, make those that eat it giddy and drunk: When ripe it is insipid and astringent. They reduce it to Powder after having dried it in the Sun, and having mix'd it with *Betle*, burnt Oyster-

Oyster-Shells, Camphire, Aloes Wood, and a little Ambergrease, they form all into Troches, which they chew in their Mouths to make them spit and purge the Head.

[The *Arca* is the Fruit of the *Palma Aracifera nucleis versicolore nuclei mafehata simili*. Par. Bat. Pr. 361. *Palma fanfelifera*. Jonsf. Dendr. 151. The Fruit is never used with us, but its inspissated Juice is what we call *Terra Japonica*, to be treated of hereafter.]

38. Of Coloquintida.

Poinet. *Coloquintida* is a Fruit of the Size of our Rhennet Apple, that grows upon a climbing or viny Plant, that has green Leaves, very like those of the Cucumber. The Fruit, being upon its Stalk, is of the Colour of the *Calabash*, and grows plentifully in several Parts of the *Levant*, from whence it is brought to us, freed from the fine Skin, or outward Shell, which is yellow.

Chuse the finest white *Coloquintida* Apples, that are light, round, and as little foul and broken as may be. Those who have their *Coloquintida* from *Marseilles*, or other Parts, order their Correspondents, if they wou'd serve them well, to take care that the Apples be not broken, and the Seed shak'd out; otherwise, out of an hundred Weight of *Coloquintida* they shall find sixty Pounds of loose Kernels, which are to be thrown away.

Coloquintida is one of the bitterest and most purgative Drugs in Physick; therefore it ought not to be used but with great Precaution, and especially not without throwing away the Seeds. It is a strong Purge, and is an Ingredient in many Compositions. The Troches of *Albandal* made of it purge in a very small Dose, and an Extract is made from it which purges strongly in three, six, twelve, or fifteen Grains. The Confectioners cover these Seeds with Sugar, and sell them to catch or delude Children with. The Apothecaries keep them by them to powder, and put into their purging Compositions, especially the common *Lemitive Electuary*; which is a great Abuse, and a very wicked Practice.

Colocynthis, vel Colocynthis fructu rotundo minor, vel Cucurbita Sylvestris fructu rotundo minor: The lesser *Coloquintida* with the round Fruit, or the lesser wild Gourd with the round Fruit, is an *Indian* Plant, which bears several Stalks that creep upon the Ground, hairy and rough. The Leaves grow singly, ty'd to long Stalks, running one from another, large, indented, hairy, rough and whitish, especially on the Outside, mark'd with several white Spots; the Flowers are of a pale Yellow,

succeeded by a Fruit about the Size of a moderate Orange, almost round, and naturally pretty dry and light, cover'd with a hard Bark, or entire Shell, that is of a yellowish shining Green. The *Indians* separate, or pull off this Bark, and having dry'd the fleshy Part of the Fruit, they bring these Apples of different Sizes, white, spongy, light, and of an intolerable Bitterness, which is what we call *Colocynthis Officinatum*, or the *Coloquintida* of the Shops. There are several Cells, or Apartments, fill'd with large Seeds, like those of *Melon*, but shorter, more fleshy, and a great deal harder, of a yellowish Colour, inclining to White. They cultivate this Plant in several Parts of the *Levant*.

Chuse such as are fine, large, white Apples, fleshy, well dry'd, light, that will easily break, and are very bitter; they yield a great deal of Oil, together with volatile and essential Salt. The *Coloquintida*, separated from the Seeds, is call'd Pulp of *Coloquintida*, and is often used in Physick: It purges violently by Stool, is proper to evacuate the serous Humours of the more gross Parts of the Body, and is recommended in the Epilepsy, Apoplexy, Lethargy, Small-Pox, overflowing of the Gall, Sciatica and Rheumatism: but ought never to be administer'd alone, but used in Compositions, as Pills, Confections, Troches, and the like.

[*Colocynthis* is the Fruit of the *Colocynthis vulgaris*. Park. 160. *Colocynthis fructu rotundo minor*. C. B. Pin. 313. It is brought to us from *Aleppo* and the Island of *Crete*. It is the roughest Purge we know; taken in a large Dose it not only often brings away pure Blood, but also produces Cholicks, Convulsions, Ulcers in the Bowels, and fatal Hypercatharsis. It is used in Clysters in Apoplectick Cases; and mixed with *Ox Gall* will purge Children if apply'd to the Navel.

There is a larger Species of this, the *Colocynthis fructu rotundo major*, C. B. Pin. 313. Hist. Ox. 2. 27. which is said to possess the same Virtues, but is never used.]

39. Of the Grana Tiglia, or Indian Kernels.

THE *Grana Tiglia* are the Fruit of a Species of the *Ricinus*, very common in the *Antilles* Islands, which grows to the Height of a Fig-Tree, and is something like it in Figure: The Wood is soft and brittle, the Leaves are something like those of the Fig, green, soft, roundish, set irregularly on the Branches, and ending in three Points. Both the Wood and Leaves yield a milky Juice. The Flowers are composed

of several yellow *Stamina*, supported by a five-leav'd green *Cap.* The Fruit are of the Shape and Size of a middling Nut; they are green at first, afterwards yellowish, and black when quite ripe: Each Fruit is composed of three *Capsulae*, each including a white Kernel, cover'd with a black cartilaginous Film.

The Plant that bears this Fruit is call'd, in Mr. *Herman's Paradisus Batavus*, *Ricinus arbor fructu glabro Grana Tiglia Officinis dicto*, which signifies the *Ricinus* with the smooth Fruit, call'd in the Shops, *Tyle-Seed*, or *Tilli-Berries*. The Kernels ought to be chosen fresh, plump and fleshy; the least fill'd with Husks, Shells, or other Filth and Dirt that can be. Take care that they be the true Nuts, and that those of the *Palma Christi* be not impos'd upon you in their Stead, which is difficult enough to distinguish, when the *Palma Christi* is not speckled; for when it is so, you can scarce be deceiv'd; otherwise when it carries the Colour of the *Grana Tiglia*, 'tis not easy to know the Difference.

The Use of these Kernels is to purge, and they are indeed one of the greatest Purgatives we have, which makes it that we ought not to meddle with them, but with great Care and Precaution, not venturing to administer them but to strong and robust Bodies. As to the Quantity, one may give six, eight, or ten Grains in Weight, according to the Constitution. Some affirm that it is nothing but the thin Membrane, or Skin that covers the Kernel, which gives it the purgative Quality, which I cannot affirm positively, as I am not quite certain of the Truth of it.

Besides these, which we improperly call the small Kernels, we sell another Sort, call'd *Barbary Kernels*, large *Indian*, or *American Kernels*; which are the Seeds of what *Caspar Baubinus* calls *Ricinus Americanus, semine nigro*; the *American Ricinus* with the black Seed.

Besides these, there are two Sorts of *Indian Kernels*, which we do not trade in at all, by Reason of their great Scarcity. The first are Kernels of the Size and Shape of the Filbert, extremely white, and are cover'd with a hard Shell of different Colours; to wit, grey and reddish; these grow three together in a Shell, of a triangular Figure; the Plant which produces them being call'd *Ricinus fructu maximo*, or the *Ricinus* with the large Fruit.

The second Sort are little long Kernels, of the Bigness of a Pin's Head, spotted a little, like those of the *Palma Christi*, which grow together, in a little three-corner'd Pod, of the Size of a Pea: These little Pods, or Shells, differ from the *Indian Kernels*, in that the Shell is composed of five little hairy greenish Leaves. The

Plant which produces these, has Leaves like those of *Dittany of Crete*, only that these are greenish, and those of *Dittany* are whitish. These little Fruits are extremely scarce, and the Plant that bears them may be call'd *Ricinus Indicus fructu minimo*, the *Indian Ricinus* with the least Kernel. As for the *Palma Christi*, the great and the small, together with the Fruits of the Spurges, I shall say nothing of them, because many others have treated of them; and the rather because honest People will have nothing to do with them.

Ricinus Vulgaris, according to *Bauhinus* and *Tournefort*, or *Cataputia major Vulgaris*, the common *Ricinus*, or greater Spurge, is a Plant that has the Resemblance of a small Tree, whose Stalk rises six or seven Feet high, thick, woody, hollow within like a Reed, branching at the Top, of a dark, purple Colour, cover'd with a white Powder like Meal; the Leaves are in the beginning round, but as they grow bigger they become corner'd, and divided like the Fig-Leaf, but much larger and soft to the Touch: The Flowers are so many pale *Stamina*, Threads, or Chives, which do not last long, and which leave nothing after them, either of Seed or Berry: These Fruits growing separately, either upon the same Stalk, disposed in the Nature of a Bunch that is prickly and rough to the Hand: Each has three Sides, and is made up of three *Capsulae*, which contain severally an oval or oblong Seed; pretty thick, of a livid Colour, spotted without, and fill'd with a white tender Pith: When the Fruit is full ripe, it is full of Chinks, or Cracks, by which the Seed rushes out with Force; the Root is long, thick, hard, white and stringy; they cultivate this Plant in Gardens, not only for its Beauty, but because it drives away the *Moles*; it grows of different Sizes and Heights, according to the Places wherein it is set; for in *Spain* one may see them of the Height of a Man; and in *Candia* there are others that grow to the Bulk of large Trees, provided there be Poles for them to mount on. The *Ricini*, or *Tyle-Berries*, are used in Medicine, and contain in them Plenty of Oil and Salt; they purge violently all Sorts of Humours, and may be given from one Grain to six.

There is an Oil made of them by Expression, after they have been well beat, call'd in *Latin*, *Oleum de Kerva*, *Oleum Cicinum*, *Oleum ficus infernalis*: It purges only by rubbing the Stomach and Belly with it; it kills the Worms, cures the Itch, deterges old Ulcers, and allays the Suffocation of the Womb. These Berries are brought from *America*, and are call'd in *Latin*, *Grana Tiglia*, *Tyle-Berries*.

[We have four Kinds of the *Ricinus* Seeds brought over, tho' neither of them are now ever used in Medicine; they are call'd, 1. the *Mexico* Nut, or *Mexico* Seed; 2. the *Barbadoes* Nut; 3. the *American* Purging Nut, and, 4. the *Tiglia*.

The first of these is produc'd by the *Ricinus five Caputia major vulgarior*, Park. 182. *Nhambu Guachu five Ricinus Americanus*, Pil. 180.

The second by the *Ricinus Americanus*, Ger. 399. *Ricinus major Americanus Curcas dictus et faba Purgatrix Indiæ Occidua*, J. B. 3. 643.

The third by the *Ricinus Americanus tenuiter Diviso folio*, Breyn. Cent. 116. *Ricinoides arbor Americana folio multifido*, Tourn. Inst. 366.

And the fourth, the *Grana Tiglia* of the Shops, by the *Ricinus arbor fructu glabro Grana Tiglia Officinis dicto*, Par. Bat. Pr. 370. *Palma Christi Indica*, Tourn. Mat. Med. 75.

The first of these Plants is a *Ricinus*, but the others are *Ricinoides*.

The second Species is common in *America*; the Seeds of it are distinguish'd from the *Grana Tiglia* by a small black Speck at the End, which the others have not: They purge violently, but if the Skin that covers them be taken off, they lose their purgative Quality, and may be eaten with Safety. New-comers into *America* are often catch'd by the Natives, for want of knowing this Secret.

The *Grana Tiglia* are the most violent of them all; two Grains of them will work vehemently, upwards and downwards.

40. Of the White Pine Kernels.

THESE are a white Sort of little, longish, round Kernel, of a sweet

Taste, to which they give the Name of sweet Pine Kernels. These small Kernels are cover'd with a thin Pellicle or Skin, that is light and reddish, and with a very strong Nut like Shell; these Nuts, with their Kernels, are found in the Pine Apples, and are call'd, for that Reason, Pine Nuts, Pine Kernels, or Almonds of the Pine Fruit: Those we now sell come from *Catullonia*, as likewise from *Provence* and *Languedoc*, and several other Parts of *France*. To get the Kernels from the Pine Apples, they are thrown into a hot Oven, where the Heat makes them open; after which they break the Nuts, and take from thence the Kernels, which are sent to different Parts of the World: Chuse them white, the largest and least mix'd with Shells and Skins that you can get, and which are of a sweet Taste; in a Word, which neither smell of Oil or Mustiness: They are much used, especially in *Lent*, to make several Sorts of Ragous: The Confectioners cover

them with Sugar, after having stoved them some Time to take out the Oil: They make an Oil of them by Expression, which has the same Virtues with Oil of Sweet Almonds, especially when the Kernels are fresh and new: They are sometimes used to feed Canary-Birds; and the Paste, after the Oil is press'd, is good to wash the Hands with.

There are several Sorts of *Pine Kernels*, from the several Sorts of Pines *Lemery*, which produce them; I shall give you an Account of four; one whereof is cultivated, and the other three wild.

The cultivated Pine is call'd *Pinus*, or *Pinus Sativa*, vel *Domestica*, by *Bauhinus*, *Raius*, *Tournefort* and *Gerard*: The Trunk of which is large, upright, and tall; naked, or bare at the Bottom, and full of Branches at the Top, cover'd with a rough, reddish Bark; the Wood is firm, strong, yellowish and scented; the Branches are disposed in Order; the Leaves grow two and two, long and small like Threads; hard, durable, and constantly green; pointed or prickly at their Tops; surrounded at the Bottom with a membranous Sheath. The Husks or Shells, are of several membranous Foldings, which contain two Cells, fill'd with nothing but a light Dust; these Husks leave no Fruit behind them; that growing upon the same Stalks with the Leaves, begins by a Button, and arrives to be a large scaly Apple, almost round, or pyramidal, of a reddish Colour: The Scales which form it are hard, woody, thicker commonly at the Point, or Top, than at the Bottom; hollow lengthwise, with two Cavities, each of which contains a hard Shell, or oblong Nut, cover'd or edg'd with a thin, light, reddish Rind; they call these in *Latin*, *Strobili Pinei*, seu *Nuces pineæ*, or Pine Nuts, which enclose in each an oblong Kernel, half round, white, sweet to the Taste, and tender.

The second Sort is call'd *Pinus Sylvestris*, by *Raius*, &c. or *Pinus Sylvestris vulgaris Genevensis*, by *Bauhinus* and *Tournefort*, the common wild *Genev* Pine; this grows, usually, less high than the cultivated, but sometimes it attains to the same Height and Size; its Trunk more frequently fruit, but is sometimes crooked; the Leaves are long and narrow; the Fruit much smaller than the first, more resinous, and falls easily when ripe: This Tree grows in mountainous and rocky Places.

The third Sort is call'd *Pinus sylvestris Mugo*, seu *Crein*, or *Pinastr Austriacus*, the *Austrian wild Pine*, being a diminutive Pine, which grows not above the Height of a Man; it divides itself from the Root into several large Branches, that are flexible and pliant, spreading wide, cover'd with a thick, rough Bark; the Leaves are of the same

same Form, and disposed like the Cultivated Pine, but much thicker, denser, less sharp of Point, and heavier; the Trees are not so big as those of the Larix, or Cypress, but they are scaly, and a pyramically like other Pine Apples; the Bark is thick and woody. This Plant grows in mountainous and stony Ground, as about the Sea, and among other Rocks.

The fourth Sort is call'd a *Pinus sylvestris Maritima*, some *Pinus pinaster sylvestris*, by Bauhins, Ray and Tournefort, or *Pinus sylvestris aerea Maritima*, the wild Sea Pine: This is a small Tree whose Wood is white, strong-scented and resinous; the Leaves are like those of other Pines; the Fruit are in Pairs, and shew'd like those of the cultivated Pine, but a great deal less, being ty'd loosely to the Branch, by their woody Stalks: This Plant grows in mountainous Parts, near the Sea.

All the Pines that grow in the hot Countries yield Plenty of Resin, by Incisions made in their Bark; they afford Abundance of Oil and essential Salt: The Bark and Leaves of the Pine are astringent and desiccative. We have *Pinus Kernels* from Catalonia, Languedoc and Provence, which are taken from the Pine Apples, as taught by Pomet. Chuse such as are new, plump, clean and white, that have a good sweet Taste; they contain a great deal of Oil, and some Salt, are pectoral, restorative, sweeten and correct the Acrimony of Humours, increase Urine and Seed, cleanse Ulcers of the Kidneys, resolve, attenuate, and mollify, and may be used internally and externally.

[The *Pinus Kernels* used in Medicine are produced by the *Pinus sativa frus Domestica*, Ger. 1173. *Pinus Urbana frus Domestica*, Park. 1534. They are emollient, agglutinant, and very nutritive, and therefore very good in Consumptions, and make a pleasant Emulsion, like Almonds.]

41. Of the White Ben Nut.

THE Ben, or *Behen*, is the Fruit of *Pemet*. a Tree that grows in *Arabia*; it rises to the Height of the Birch Tree; the Leaves are roundish, very small in Proportion to the Bigness of the Tree, rang'd by Pairs on Ribs, and at Distances from one Pair to another; the Fruit is a Pod, or Husk, five or six Inches long, composed of two furrow'd tough Pieces, of an insipid rather than astringent Taste, and enclosing, in different Cells, white triangular Seeds, as large as Hazel-Nuts, which have, under a thin Skin, a bitter oily Kernel, like that of a Nut, but whiter. The Tree which bears the Ben is very scarce in *Europe*, and the Figure

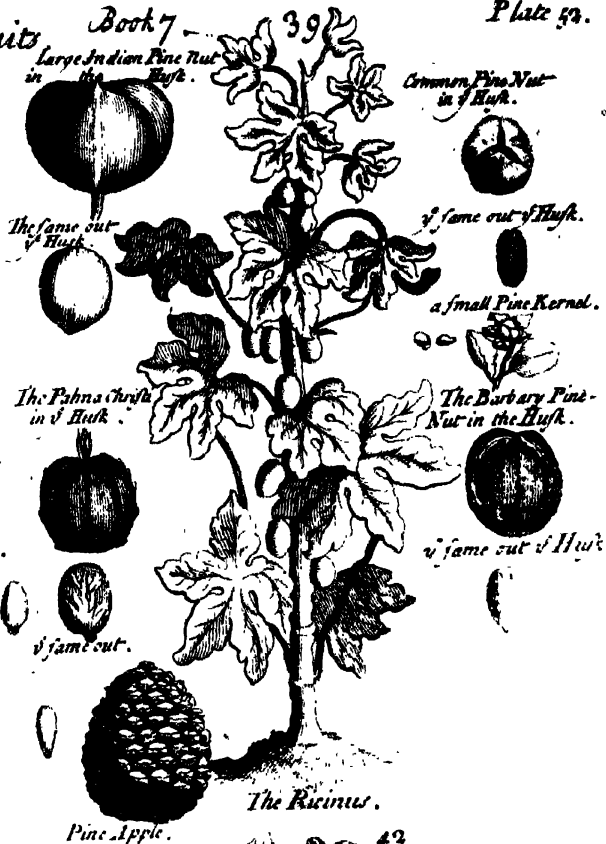
I here give you, is taken from that which is at Rome, in the Garden of Cardinal Farnese.

Oil of *Behen* is white, fresh, and the least of the four. They are used to make an Oil of, which has a great many good Qualities; the best is, that it has neither Taste nor Smell, and never grows rancid, which makes it of great Use to the Perfumers and others, for taking the Scent of Flowers, as *Jessamine*, *Oranges*, *Tuberose*, and the like. With this Oil it is they make all their sweet Essences, adding to the Flowers whatsoever they fancy, *Ambergrease*, *Musk*, *Civet*, *Benjamin*, *Succae*, *Balsam of Peru*, &c. They grow in *Syria*, *Arabia*, *Ethiopia*, and *India*, where they come to Perfection, which they scarcely ever do in *Europe*.

The whole Nut is of a purging Quality, and the dry Pressing, or Powder, after the Oil is taken out, is cleansing and drying; the Shells, or Husks, bind extremely; the Kernels bruised, and drunk with a little Ale, purge the Body from gross and thin Flegm; the Oil, which is drawn out of the Nut, does the same, provokes vomiting, and cleanses the Stomach of foul Matter gather'd therein; but the Nut itself, in its gross Body, does much more trouble the Stomach, unless it be roasted at the Fire, for then they lose much of their sturteck Quality, and only purge downwards, they are given in Clysters with very good Effect to cleanse the Bowels and cure the Cholick; the Kernels, taken in Posset-Drink to a Dram, mollify the Hardness of the Liver and Spleen. The Oil, besides its excellent Use to the Perfumers, is employ'd by the Glovers and Skinners to preserve their Leather from Spots or Stains, or from ever growing mouldy, as those perfum'd with Oil of Almonds do. It more easily extracts, and longer retains the Perfume of any thing infused in it, than any other Oil whatsoever; being dropp'd into the Ears, it helps the Noise in them, and Deafness. The Kernel used with Vinegar and Nitre, is good against the Itch, Leprosy, running Sores, Scabs, Pimples, and other Defecations of the Skin. Mix'd with Meal of *Orabus*, and apply'd plaisterwise to the Side, it helps the Spleen, and eases the Gout, and Nerves which are pain'd with Cramps, Spasms, Colds and Bruises. Mix'd with Honey, it dissolves Nodes, Tophes, Knots, and hard Tumours.

Ben parvum vel Balsamum Myrsifica, *Pharagen incolis aff montem Sinai*, or *Lemery*. *Granum Ben*, the *Ben Berry*; is a Fruit like a Hazel Nut, oblong, triangular, or raised with three Corners, cover'd with a Rind, or thin Scale, pretty tender, and of a grey or white Colour. Within the Bark, or Rind, is a white oily Almond, of a sweetish Taste. The Fruit grows upon

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of Fruits .



Amends .



Citrons .



Citrons .



The sweet or Portugal Orange .

48



The Bigarade or large Orange .



Sour Orange



Vine Orange

upon a certain Tree in *Ethiopia*, resembling the Tamarisk. Chese such as is new, large, and well fed: There is an Oil made of *Ben* of Almonds, by *Expreſſion*, call'd *Oleum Balaninum*, and which is of this singular Quality, not to be compar'd with any other. The *Ben* purges upwards and downwards, and is good for all pituitous Humours, taken from half a Dram to a Dram and a half: It is cold, viscid, resolute, and drying.

There is also another Species of *Ben*, which is called *Ben Nuts*, in his History of *India*. *Ben Nuts* is the Seed of the *Avellana purgatrix*, the Tree of which is called *Avellana*. It grows in *America*, and is brought from *St. Domingo*, but is scarce in *Europe*: It purges upwards and downwards: The *Indians* use it for the Wind-Colic, the Dose from half a Dram to a Dram, they weaken its Force by roasting of it.

The *Ben Nuts* the Fruit of the Tree whose Wood is the *Lignum Nephriticum*, described in the third Book.

The *Avellana Purgatrix* of *America*, *Lemery* mentions here as another Species of the *Ben Nut*, is the Seed of the *Ricinus arbor Americana folio multifido*, Tournefort's in the last Chapter.]

42. Of Pistachia Nuts.

Pomet.

THE *Pistachia* is a Fruit of the Tree, and Shape of a green Almond, which spring from several Parts of *Persia*, and other Places in *Asia*, especially from about a Town call'd *Malabar*: the Tree which bears them is much of the Height of a Nut-Tree, and the Leaves fall off early, after which come Fruits in Clusters, very beautiful to look upon, being green mix'd with red. Under the Skin of Blue, is found a hard white Shell, which contains a Kernel of green and is wrapped on the Outside with green within: it is a sweet pleasant Fruit. Crush your *Pistachias* in the shell, very hard, and fall in shreds, such that three Pound Weight of them in the Shell may yield a Pound when broken, this is, a Pound of Kernels.

As to the shell'd *Pistachias*, there are newer, that are red without and green within, and the least bruised that can be. As to their Use, some esteem the largest, and others the small, especially the Confectioner, when he is to use them for mending over with Sugar, in order to make what they call *Pistachia Comfits*. They are very little used in Physick, except that they put them into some Galenical Compositions, being a good Restorative in old Age. They make an Oil of the *Pistachia*, but it is of so little Use, I shall say nothing of it.

Pistachia, *Phistachia*, *Fistici*, or the *Pistachia*, is a Fruit of the Shape and *Lemery*. Bigness of the green Almond, which is brought from *Persia*, *Armenia*, *Syria*, and the *Indies*. They grow in the same manner as the Turpentine Tree, call'd *Pinaster*, by *Theophrastus*, or the *Pinaster*, by *Tournefort*, &c. and by *Perron*, *Pinasteria*. This Tree bears Leaves, which are like the common Turpentine Tree, but larger, which are sticky or stinky, and are most plentiful, raised generally upon a long stem, terminated by a single Leaf. The Flowers are small in number, in which are fix'd at the Bottom, Clusters of Threads, which rise to the Top of the Flower, of a yellow Colour; these leaves and Fruit being small, and growing upon Stalks that bend not to the wind.

The *Pistachia* has two Sorts of Nuts; the first is tender, of a reddish Colour, and is with red; the second is harder, of a white Colour, and brittle; they end in a hard white green Colour, mix'd with red on the Outside and green within, of a sweet agreeable Taste. They are pectoral, sperive, moistening, restorative, satisfy the Stomach, and procure an Appetite. The ripe Nut is so soft, is freely and liberally eaten by People of Quality, as well to gratify the Palate, as for physical Uses.

[The *Pistachia* is the Fruit of the *Pistachia vera*, *fructu racemoso*, by *Terebinthus* by *Theophrastus*, &c. H. B. p. 401. *Pistachia vera racemosa*, Jonst. Dendr. p. 22. It is common in the hot Countries. The Fruit is frequently eaten, but has little Use in Medicine.]

43. Of Almonds.

WE sell two Sorts of Almonds, the Sweet and the bitter. The Trees Pomet. which produce these are so common, that it is needless to give any Description of them, contenting myself only to say that both Sorts of Almonds come from several Parts, as *Arvence*, *Lebanon*, *Barbary*, and *Chion* in *Paragon*, but the most useful of all, are those that grow about *Arvence*, because they are usually large, of a high Colour, that is to say, reddish without, and white within, of a sweet pleasant Taste, which is contrary to those of *Chion* and *Barbary*, that are small and sourish. As to the Use of the sweet Almond, it is so considerable, and so well known throughout the World, that it is needless to mention it. I shall say only of the Oil, as being a Remedy of great Consequence, considering the vast Consumption that is made of it. There are beside sweet Almonds sold in the Shell, call'd, tho' improperly, *Florence Almonds*, for the

greatest Part of what are sold of them, are brought from *Languedoc* and *Touraine*; the best of these are reckon'd those that break easily under the Thumb. These are of scarce any other Use than to furnish Gentlemen's Tables as Part of the *Desert*.

Amygdala or the Almond, is the Fruit *Lemery*. of a Tree call'd in *Latin* *Amygdalus*, or the Almond-Tree, which is cultivated in our Gardens. The Leaves are long, narrow, and ending in a sharp Point, of a bitter grateful Taste; they resemble the Peach Leaves, and are hardly to be distinguish'd from them when pluck'd from the Trees, except that they are tougher or more pliant. The Flower is also very like that of the Peach, but much whiter, and less purgative. It is succeeded by a hard woody Fruit, oblong, cover'd with a hairy greenish Husk that is fleshy. It contains within it an oblong flat Almond, which all the World knows. There are two Kinds of Almonds, the first whereof, or the sweet, are pleasant to eat, of good Nourishment, and proper against Laifs and the Bloody-Flux; they are pectoral and opening, good against Coughs, Cold, Asthma's and Consumptions. An Emulsion or Milk made of them with Barley-Water, is a good Drink in Fevers, Diarrhoeas and Dysenteries. The Virtues of the Oil will be mention'd under that Head.

[The sweet Almond is the Kernel of the Fruit of the *Amygdalus sativa fructu majore*. Boerh. Ind. 2. 245. C. B. Pin. 441. *Amygdalus Dulcis*. J. B. 1. 174.

And the Bitter of the *Amygdalus Amara*. Boerh. Ind. 245. C. B. Pin. 441.

The Sweet make an exceeding pleasant Emulsion, good in all Disorders from acrimonious Humours.

The Bitter are aperient, deterfive, and diuretick, good in Obstructions of the Liver, Spleen, Mesentery and Womb, and are also said to take off the Effects of Drunkenness.

Our present Race of Chymists, as they call themselves, make what they sell under the Name of Black Cherry Water from these, as they give the same Kind of Flavour by Distillation as the Kernel of the Cherry Stone; and they use for this Purpose only the Refuse Almond Cakes, from which the Perfumer has before express'd what he sells under the Name of Oil of Sweet Almonds.]

44. Of Oil of sweet Almonds.

Pomet. OIL of sweet Almonds is prepar'd several Ways: Some do it by blanching, and others by pounding them as they are; some use good Almonds, and others bad ones, and every one according to his Capacity and his Conscience; the Method of expressing the Oil is so commonly known, that it wou'd

be trifling to pretend to give any Account of it at this Time of Day; I shall therefore only inform you that there are two Sorts, the one drawn by the Fire, and the other without, which is call'd the cold drawn Oil, and is only proper for internal Use, the hot being subject in a short Time to grow rank and stinking. After the same Manner Oil of bitter Almonds is made, chiefly for external Use; as likewise Oil of Walnuts, Hazel Nuts, Ben, white Pine-Kernels, and of the Ricinus Seeds call'd Oil of the infernal Fig, which is much used by the Savages to kill Vermin; as also from white Poppy Seeds, the four cold Seeds, Linseed, and the like, by Expression, and without Heat. As to the Way of chusing all these Sorts of Oils, the best Advice I can give you is to deal with honest People that are above putting a little Cheat upon you, and not to deal with Hawkers, but give a Price for that which is good in its Kind.

Besides the Oil, there are Mackaroons made by the Confectioners out of the Almonds blanch'd and beat up to a Paste with Sugar, &c. The Almond-Paste which remains after the Expression of the Oil, serves the Perfumers to sell for washing the Hands, and making the Skin smooth. The Oil by Expression new drawn, is good against Roughness and Soreness of the Breast and Stomach, Pleurifies, Coughs, Asthma's, Wheezings, Stitches, hecstick Fevers, Ulcers in the Kidneys, Bladder, Womb, and Guts; and helps Scalding of Urine. Oil of bitter Almonds helps Deafness, if dropt into the Ears, as also Pains and Noise therein. Outwardly it takes away Spots in the Skin, and brings down the great Bellies of Children. Oil of bitter Almonds given inwardly with *Manna* and *Sugar-candy* is good against Cholick and Stone, Gripes in Children, dry Coughs, and for Women in Labour. Some say that the Oil of sweet and bitter Almonds both may be preserv'd from being rank by the Help of Spirit of Wine tartaris'd.

[The Oil of sweet Almonds is generally more carefully prepar'd than that of the bitter; the Almonds are blanch'd, and beat to a Paste in a Marble Mortar, and the Oil press'd out without the least Assistance of Heat.

That of the bitter is generally made from them Skins and all, and they are thoroughly heated before they are put into the Press, and this is commonly sold and used under the Name of Oil of Sweet Almonds.]

45. Of Citrons.

Pomet. THE Citrons, both the sweet and sour, are Fruit so common, and so well known in most Parts of the World,

World, that I shall pass by their Description, and content myself to say that what we sell comes from *St. Rhemus* about *Genoa*, *Nice*, and *Antion*, a little Village belonging to the Duke of *Savoy* from whence they are brought by Sea and Land to *Marseilles*, *Lyon*, *Rouen* and *Paris*. The Sale of *Citrons* is not made in the Cities aforesaid, except *Nice*, but by the Determination of the Council of the Place, it happens twice a Year, that is to say, in *May* and *September*; sometimes three Times a Year, according as the Crop or Harvest is considerable, and when the Time of the Sale is, they sell only such as will not pass through an Iron Ring made round for that Purpose, all that go through serve to make into Juice, which they transport to *Avignon* and *Lyon*, for the Dyers in Grain. As to the choice of sweet or sour *Citrons*, the Commodity is too well known to need any Description.

46. Of Oil of Citron.

WE sell two Sorts of *Citron Oil*, to wit, the common, and that which is call'd the Essence of *Cedre*. The first and most valued is that which bears the Name of the *Cedre* Essence or *Bergamot*, which is made two Ways, either by the *Zest*, or the rasping or grating of the Citron-peel fresh; with an Alembick and Water they draw this Way a white odoriferous Oil, like the Oil of sweet Almonds, but that it is not so gross and fat. The second Sort is the common Oil of Citrons, which is greenish, clear, and fragrant, and is made by the Alembick, with the Lee or Settling that are found in the Bottom of the Cask, wherein Juice of Citrons has been kept; fifty Pounds whereof will afford three Pounds of clear Oil, more or less, according to the Goodness and Newness of the Citrons. These Oils are used by the Perfumers, because of their agreeable Smell, especially the essential Oil. As to the four *Cedre*, or *Bergamot*, 'tis a Juice made from a certain Kind of half-ripe Citrons that come from *Bourgaire* near *St. Rhemus*, from whence it is carry'd into several Parts. The Use of it is likewise for the Perfumers, and it is also used by several other Persons.

47. Of candied Citrons.

WE have small *Citrons* brought from the *Madeiras* of different Sizes, candied two sorts of Ways, to wit, dry and liquid. They are very pleasant to eat, and should be chosen tender, green and new. There is besides, the Citron-peel, that comes from the *Madeiras*, candied dry, the best of which is the freshest, in little Pieces,

clear and transparent, very green on the Outside, and the most frosted with the Candy within that can be, very fleshy, easy to cut, and well dried, not full of black Spots, which happens not to it but by Moisture, which it gets by Age.

The Citron-peel is much used, because it is excellent to eat. There is, besides, what we call Chips, that are cut into little Pieces. The *Turks* with the Juice and Sugar make what they call *Sorbec*, the best of which comes from *Alexandria*. With the clarified Juice and fine Sugar we make Syrup of Citron, to cool the Blood, and quench Thirst. The Citron Juice which is made at *Paris*, is not fit for any Thing, being made chiefly of decay'd Citrons.

Citron-peels come also to us from *Spain* and *Portugal*; those which look fresh and of a lively yellow Colour, and that have a fragrant Smell, are best; if the Colour and Smell be decay'd, they are not of much Value. They are cephalick, neurotick, stomachick, cardiack, hysteric, and alexipharmick, good against all cold and moist Diseases of the Head and Nerves, Bitings of Serpents and mad Dogs, and all Sorts of malignant and pestilential Diseases; Measles, Small-Pox, Plague, Surfeits, &c.

Under this Head it may not be improper to say something of *Lemons*, which are much of the same Nature. They grow in all the southern Parts of *America*, as also in *Spain*, *Portugal*, *Italy*, and *France*, and with much Care and Housing in the Winter in *England*. The Juice, which is that we intend to speak of here, is sharper than that of Citrons, and therefore dryer and cooler. It is of good Use in Weakness of the Stomach, Vomiting, violent burning Fevers, as also in malignant and pestilential Fevers, and in Diseases of the Kidneys and Bladder. It is also used as a *Menstruum* to dissolve Bodies, and in some Mixtures and Drinks. A Syrup of Lemons for the same Purpose is made with an equal Quantity of Sugar, and thus the Juice is preserv'd; for if it be kept long by itself, it will be apt to grow musty, and lose its Acidity.

Citream vulgare, as Mr. *Tournefort* calls it, is a little Tree that is always Lemery-green, whose Branches spread wide, and are pliant, cloth'd with a smooth green Bark. The Leaves are plain, long, and large as the Walnut, pointed like those of the Bay-Tree, but more fleshy, indented on their Sides, of a fine green shining Colour, especially on the outside, and of a strong Flavour. The Flower is made up of five Leaves, round, the Colour white, inclining to red or purple, of a pleasant Smell, supported by a round hard Cup. When the Flower is gone, the Fruit forms itself usually oblong,

oblong, sometimes oval, and sometimes almost round, as thick as a large Pear, cover'd with a rough uneven Rind, fleshy, thick, of a green Colour at the Beginning, but as it ripens it becomes of a light Yellow without, white within, of a very agreeable Smell, and a biting aromatick Taste. This Rind covers a vesiculous Substance, divided into several Cells, or Partitions, full of a Juice that is acid and very pleasant to the Taste, and with some oblong white pithy Seeds, of a Taste that is a little bitter. The Fruit carries the Name of the Tree that bears it, which is the *Citron* Tree, cultivated in the hot Countries, as *Italy*, *Provence* or *Languedoc*; the Fruit is chiefly used in Physick, the Leaf and Flower very rarely.

These two latter, namely the Leaf and Flower, afford abundance of Oil, volatile and essential Salt; they are cordial and strengthen; the Rind, especially the very outward Part that is yellow, yields a good deal of volatile Salt and Oil: It is proper to fortify the Heart, Stomach and Braim, and to resist Poison. The Juice contains in it a Quantity of essential Salt and Flegm, but very little Oil: It is cordial, cooling, proper to abate the Heat of the Blood, to precipitate the Bile, to quench Thirst, and resist Poison. There is a Way of sticking a Citron all over with Cloves, to carry in the Pocket to smell to in any epidemical Sickness, in order to drive away the Contagion. There is another Kind, call'd the *Sweet Citron*, because not sharp as the other; but in no Esteem either for its Use or Beauty.

[The *Citron* is the Fruit of the *Malus Citria* *frus Medica*. Rai. Hist. 2. 1654. *Citrum vulgare*. Boerh. Ind. Alt. 2. 420. It is cultivated in Spain and Italy, and the *Lemon* of the *Malus Limonia*. Rai. Hist. 2. 1656. *Malus Limonia acida*. C. B. Pin. 436.

The *Citron* and *Lemon* have much the same Taste and Virtues, but the *Lemon* is the sharper of the two..

48. Of Oranges.

Pomet. THE sweet and sour Oranges come from *Nice*, *Asiuta*, the Isles of *Hyres*, *Genoa*, *Portugal*, the *American* *Islands*, and *China*; but the largest Store of those we use now come from *Provence*. Oranges, as well as *Citrons*, are so well known that I shall make no Description of them.

Oranges are candied whole, after having been scoop'd; and these are what we call *whole Oranges*, or *whole Candied Orange Peel*. The finest is that which is made at *Tours*, because it is clearer, more transparent, and of an higher Colour than

any other. We have *Orange Peel* cut in Chips from *Lyons*, which is what we call *Orange-peel*, and cover'd with Sugar is the *Orange Comfit*.

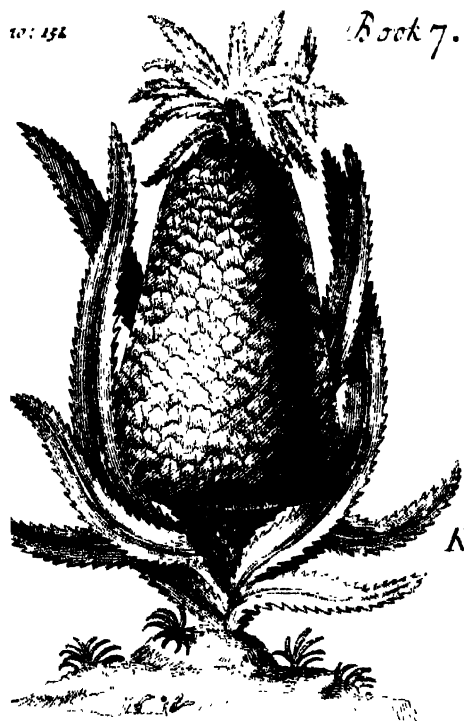
Beside the large Trade we have in the sweet and sour Oranges, and the *Bigarrade* or large Oranges, we also sell the *candied Orange Flowers*, which come chiefly from *Italy* and *Provence*; and the distill'd Water is what we call *Naptha* and *Orange Flower Water*, which is used by the Perfumers; that which is best ought to be of a sweet Smell, bitter Taste, very pleasant, and of that Year's Distillation; for what is kept above the Year loses its Smell. Those who distil *Orange Flowers* draw also a clear Oil of a strong Fragrancy, which the Perfumers call *Neroli*; the best is made at *Rome*, and the next in *Provence*: This is the common Opinion; but we may assure ourselves it is erroneous, for that it is easy to make better at *Paris* than either in *Italy* or *Provence*; the Reason is, that *Italy* and *Provence* being hotter than our Climate, the Sun more readily exhales the Odour; but we cannot draw the same Quantity of Oil as in the hot Countries, for in *Italy* and *Provence* they may make several more Distillations than we can, because the Flowers that are in Prime one Month in *Paris* hold two in *Provence* and three in *Italy*, because of their greater Nearness to the Sun.

The Difference between *Naptha* and *Orange Flower Water* is, that the *Naptha* is distill'd from the Leaves of the *Orange Flowers*, pick'd clean from the Filaments, &c. and the *Orange Flower Water* from the whole Flower as it is gather'd; the *Naptha Water* therefore, truly prepar'd, is much finer and more fragrant than the common *Orange Flower Water*.

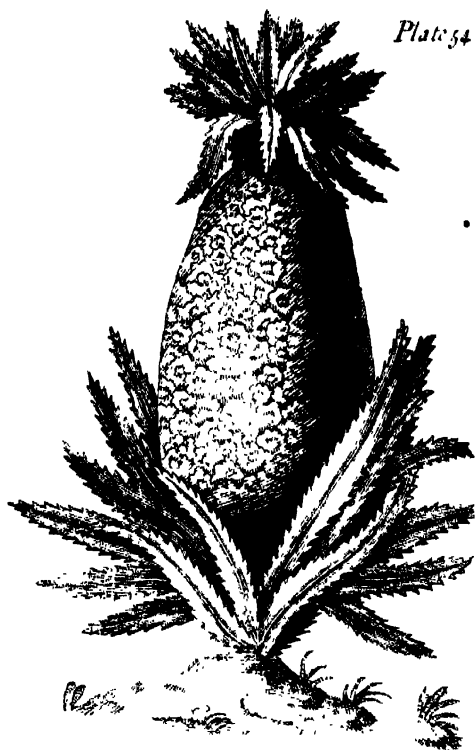
The People of *Provence* bring us an Oil which they make from the *Zests* and the outward thin Rind of the Oranges, by means of an Alembick and Water, and this Oil is of a strong sweet Smell. They bring besides another Sort we call *Orangelette Oil*, which is made of the little Oranges, which they distil in an Alembick, with a sufficient Quantity of Water, after having infused it five or six Days in the said Water. This Oil is of a golden Yellow and a strong fragrant Smell. The Oils of Oranges are excellent Remedies for curing Worms in little Children, and likewise the Water made in drawing the Oil serves for the same Purpose; upon this Account the Perfumers of *Provence* transport a great deal in Bottles and Barrels to several Parts to give to young Children. The greatest Quantities of this Oil are made at *Grasse*, *Biot*, three Leagues from *Grasse*, and at *Nice*. I ought to inform you, that most of the Oils which come from *Provence* are adulterated or mix'd with Oil of Ben, or Sweet Almonds;

for

49



The Ananas or King of Fruits.



Desert Cotton.

white
more trailing



Cotton.

for the Reason they ought not to be bought but of the true Sort.

Aurantium, Arantium, Aurum malabaricum, Aurum Nerantium vel Aneurantium, is a Kind of a fine yellow, sweet scented Apple that grows upon a Tree call'd in *Latin, Malus aurantia; Java Arangius*; the Leaves are of the same of those of the Bay-Tree, but much larger, always green, having a fine white Flower of a fragrant Smell, compos'd usually of five Leaves that stand round, and are supported by a Cup. This Tree is cultivated in all our Gardens, but especially in the warm Countries.

There are generally two Sorts of *Oranges*, one small, yellow, greenish, bitter and sharp; the other larger, of a fine golden Colour, and sweet to the Taste. The Bitter is most used in Physick, from the outward Rind of which they make *Zests*, which are endow'd with a great deal of exalted Oil and volatile Salt, which contains almost all the Scent of the Fruit; the Juice is acid, and consequently full of essential Salt. The Rind of the bitter *Orange* is much esteem'd to recreate the Spirits, strengthen the Stomach and Brain, resist the Malignity of Humours, and excite Womens Courses.

The Juice of the bitter *Orange* is cordial, and the Flower cephalick, stomachick, hysteric, and proper against Worms: The other *Orange* contains in it a sweet and pleasant Juice, compos'd of a great deal of Flegm, a little Oil and essential Salt, whereof the Rind likewise partakes in the same Degree: The Fruit is moistening, cordial, cooling, and good to allay Thirst in continual Fevers: The Seed has the same Virtue as that of the *Citron*, but is seldom used in Physick.

Others there are who divide the *Oranges* into three Sorts; the *Crab*, or sour *Orange*; the *Bitter*, or *Squille*, and the *China*, or sweet *Orange*; Of all which, the *Squille*, or bitter *Orange*, is of most Virtue, and mostly used in Physick, as the Peel for Confections, the Oil for Perfumers, Juice for Syrups, Flowers for candying, Seed, or Kernel, for Emulsions; and the Water, or Spirit, for a Cordial; in all which Forms they are stomachick, cephalick and anticholick.

[The sweet *Orange* is the Fruit of this *Aurantium Medicum sive vulgare*. Fer. Hesp. 377.

The Sour of the *Aurantium sive medulla vulgare*. Fer. Hesp. 377.

The Peel of the second Kind is what is most used in Medicine: It is a very agreeable aromatick Rind, and gives a very agreeable Flavour to bitter Tinctures and Infusions, in which it is generally made an Ingredient.]

49. Of the *Ananas*, or *Pine-Apple*, the King of Fruits.

WE may very justly, according to the Father *De Vertu*, call the *Ananas*, or *Pine-Apple*, the King of Fruits, because it is much the best and best of all that are upon the Face of the Earth. It is certainly for this Reason that the Kings are placed a Crown upon the Head of it, which is an essential Mark of its Royalty: and at the Feet of the Father it produces a young King, that succeeds in all his administrative Qualities. It is true, there are other young Kings besides that stand underneath the Fruit, and at the Bottom of the Stalk, that produce the *Ananas* in less Time, and with the same Ease, with that which makes the Crown, but it is also true, that the Fruit which is produced from this is incomparably much finer than the other.

This Fruit grows upon a round Stalk, the Thickness of two Thumbs, and about a Foot and half high, which grows in the Middle of the Plant, as the Artichok in the Midst of its Leaves. The Leaves are about three Feet long, four Fingers broad, hollow like small Pipes, bristly on the Edges, with little sharp Prickles, and ending with a sharp Thorn like a Needle. At first the Fruit is not so big as one's Fist; and the Clusters of Leaves, which is the little Crown born upon the Head, is red as Fire; from every Scale or Shell of the Rind of the Fruit, which in Shape, though not in Substance, is very like the *Pine-Apple*, there arises a little purplish Flower, which falls off and withers as the Fruit encreases.

They are distinguish'd into three Sorts, namely, the large white *Ananas*, the *Sugar-Loaf*, and the *Remet-Apple Ananas*: The first is often eight or ten Inches Diameter, and fifteen or sixteen high; the Flesh is white and fibrous, but the Rind of a golden Yellow; when it is ripe it sends forth a ravishing Smell, which is something like that of the Quince, but much more delicate; but though this Kind is much larger and finer to Appearance than the others, the Taste is not so excellent, neither is it so much esteem'd; it sets the Teeth on Edge, and makes the Gums bleed more than the others.

The second Sort bears the Name of the *Sugar-Loaf* from its Shape and Form, that entirely resembles it: Its Leaves a little longer and narrower than the former, and not so yellowish: The Taste is better than that of the former, but it makes their Gums bleed that eat much of it. I have found in this Kind a Seed like that of the Garden.

Garden Creſs; though it is the general Opinion that the *Ananas* does not feed at all.

The third is the leaſt, but the beſt, and is called the *Rennet Apple*, becauſe of its Taſte and Smell, that both have ſome kind of Reſemblance to that Fruit; it ſeldom ſets the Teeth on Edge, or makes the Mouth bleed, if it is not eat to a great Exceſs indeed; this is what each of them has particular, but they all grow after the ſame Manner, bearing their Tufts of Leaves, or their Crown upon their Head; their Rind looks like that of the Pine-tree Apple, but ſeparates, and cuts like that of the Melon; and though the Fleſh, like that of all the others, is fibrous, it altogether melts into Water in the Mouth, and is ſo elegantly taſted, that I know not how to deſcrib: its Flavour better than by ſaying, that it partakes of the Peach, the Apple, the Quince, and the Muſcadine Grape, all together.

Some, to take away the Quality of making the Gums bleed, and inflaming the Mouths of ſuch as eat too much of them, or eat them before they are full ripe; after having pared off the Rind, and cut the Fleſh into Slices, they leave it a little while to ſteep in *Spaniſh Wine*; and this not only frees the *Ananas* from this ill Effect, but it communicates to the Wine a moſt agreeable Taſte and Smell. There is a Wine made of the Juice of this Fruit, almoſt as ſtrong as *Malmſey*; and which intoxicates full as ſoon as the beſt and ſtoutest Wine in *France*. If you keep this Wine above three Weeks it will ſeem dead and ſpoil'd; but if you will have Patience with it for a little Time longer, it will recover itſelf perfectly, and be ſtronger and better than before. When moderately uſed, it is good to exulcerate the Spirits when oppreſſed, and prevent the Nauſeatings of the Stomach; is good to relieve the Suppreſſion of Urine, and is a Counter-Poiſon for thoſe who have drank of the Juice of the *Yucca* or *Manihot* Root. Women with Child, however, muſt take Care how they drink the Wine or eat the Fruit in great Quantity, leſt it ſhould cauſe Abortion. We ſell at preſent the preſerv'd *Ananas* at *Paris*, brought from the *Indian* Iſlands, which are very good, eſpecially for aged People to reſtore the natural Heat, and comfort feeble Spirits.

Ananas, *Nanas*, or *Jayama*, is a very *L-mery*. fine *East-India* Fruit, which grows upon a Plant, and of the Size of the *Apple*. This Fruit is adorn'd on the Top with a little Crown, and a Bunch of red Leaves like Fire: The Rind appears with a Shell like the Pine-Apple, but ſeparates like that of the Melon; the Fleſh is fibrous, but diſſolves in the Mouth, ha-

ving the delicious Taſte of the Peach, the Quince, and the Muſcadine Grape, all together.

There are three Sorts, as Mr. *Pomet* has deſcrib'd them from Mr. *Du Tertre*: They make a Wine from the Juice, which is almoſt equal to *Malmſey* Sack, and will fuddle as ſoon. It is proper to ſtrengthen the Heart and Stomach againſt Nauſeating, to reſreſh and recruit the Spirits; it excites Urine powerfully; but Women with Child ought to avoid it, becauſe it procures Abortion: They make a Confection of the *Ananas* upon the Spot, which is brought hither whole; this is good to warm and reſtore a weak and aged Conſtitution.

[The *Ananas*, or *Pine-Apple*, is the Fruit of the *Pinea Braſiliana Ananas dicta*, Hiſt. Ox. 3. 171. There are a vaſt many new Species of it found out ſince the three deſcrib'd by our Author; but as they have no Uſe in Medicine, it would be foreign to the Intent of this Work to enter into a Detail of them here.

They have long been produced in the Gardens of the Curious here, and are at preſent regularly ſold as other Fruits of the Production of our own Climate.

The *Yucca* Root they make their Bread of when dry; but the Juice of it is poiſonous.]

50. Of Cotton.

COTTON is a white ſoft Wooll which is found in a kind of brown *Pomet*. Shell, which grows upon a Shrub in Form of a Buſh; what Father *Du Terre* ſays of it is as follows: At firſt, when the Iſlands were inhabited by the *French*, I ſaw them, ſays he, fill their Plantations full of *Cotton* Shrubs, in hopes the *Cotton* would yield them great Profit in Trade; but moſt of the Merchants would not meddle with it, becauſe it took up too much Room, and was ſubject to take Fire, decay and the like.

This Shrub grows in Form of a Buſh, and the Branches that ſtretch wide are well charg'd with Leaves, ſomething leſs than thoſe of the *Sycamoro*, but almoſt of the ſame Shape: It bears a great many fine, yellow, large, Flowers; the Bottom of the Flower is of a purple Colour, and it is all ſtrip'd on the Inſide; it has an oval Button that appears in the Middle, and grows in Time to the Size of a Pigeon's Egg; when ripe it becomes black and divides itſelf into three Parts at Top; and the *Cotton* or *Down* in it, looks white as Snow: In the Cluster of *Down*, which ſwells with the Heat to the Bigneſs of a Pullet's Egg, there are ſeven black Seeds, as large as Lupines, ſticking together; their Inſide is white, oily, and of a good Taſte.

This *Cotton* grows in great Quantities in all the Islands, and the Natives take great Care in the cultivating of it, as a Thing very useful for their Bedding : I have observ'd one Thing of the *Cotton* Flower not known to any Authors yet, or at least not taken Notice of ; which is, that the Flowers, wrapp'd up in the Leaves of the same Tree, and bak'd or roasted over a Fire of burning Coals, yield a reddish viscid Oil, that cures in a little Time old standing Ulcers. I have often experienced it with very good Success : The Seed of this Shrub will make the Parroquets fuddled ; but it is beneficially used against Fluxes of Blood and Poisons.

We sell several Sorts of *Cottons*, which only differ according to the Countries from whence they come, and the various Preparations. The first is the *Cotton* in the Wooll, that is to say, that which is as it comes from the Shell, only with the Seeds taken out ; this comes from *Cyprus*, *Smyrna*, &c. The second is the *Cotton* in the Yarn, which comes from *Damascus*, and the *Jerusalem Cottons*, which are called *Bazac*. There are several other Sorts ; as, the *Demi Bazacs*, the *Beledin Cottons*, those of *Gondzel*, *Motafin*, and *Genequin* ; but of all the *Cottons*, we sell scarce any but that of *Jerusalem* and the Islands. The true *Bazac*, or *Jerusalem Cotton*, ought to be white, fine, smooth, the best spun, and most equal, or evenest that can be. As to the *Cotton* in Wooll, the whiter, longer, and sweeter it is, the more valuable it is. Those who buy in whole Bales, ought to take care it be not damag'd with Mould, Mustiness, or wet. *Cotton* has many Uses, too well known to need being related here. As to the black Seed which is found in the *Cotton*, an Oil may be made of it, admirable for taking away Spots and Freckles, and for beautifying the Face ; and which has the same Virtues with Oil of the Cokar Kernels, made after the same Manner by the *Indians*, especially in the Island of *Assumption*, from whence almost all the Cokars we now sell are brought.

Xylon, Coto, Gossipium, Catoneum, Lemery. *Bombyx Officinarum*, or the *Cotton* of the Shops, is a Plant whereof there are two Kinds : The first is called *Xylon sive Gossipium herbaceum*, by *J. Baubinus*, *Ray* and *Tournefort* ; *Gossipium frutescens annuum*, by *Parkinson* ; and *Gossipium frutescens semine albo*, by *C. Baubinus* ; which signifies either the Herb *Cotton*, the Annual Shrub *Cotton*, or that with the white Seed : It bears a Stalk of a Foot and a Half, or two Foot high, that is woody, cover'd with a reddish hairy Bark, divided into several short Branches ; the Leaves are a little less than the *Sycamore* Leaves, shap'd almost like those of the *Vine*, hanging to

long Stalks, adorn'd with a Nap or Hair ; the *Flowers* are numerous, fine and large, having the Shape or Form of a Bell, slit or cut into five or six Divisions to the Bottom, of a yellow Colour, mix'd with Red or Purple : When the Flower is fallen, it is succeeded by a Fruit of the Bigness of a Filbert ; which being ripe, opens into three or four Quarters or Partitions ; from whence appears a Flake of *Cotton*, white as Snow, which swells up or tumifies by Heat, to the Size of a little Apple. It contains in it gross Seeds like small Peas, oblong, white, and cottony ; each having in it a little oleaginous Kernel that is sweet to the Taste.

The second Sort is called *Xylon Arboreum*, or the Tree *Cotton*, by *J. Baubinus*, *Ray* and *Tournefort* ; it differs from the former in Bigness, for this grows into a Tree or Shrub of four or five Foot high. The Leaves approach, in some Measure, to those of the *Linden* Tree, indented deep into three Parts, without Nap or Down : The Flowers and Fruit are like those of the other Kind. The two Species of *Cotton* grow in *Egypt*, *Syria*, *Cyprus*, *Candia*, and the *Indies* : The Flowers are vulnerable ; the Seed pectoral, proper for Asthmas, Coughs, to procure Seed, consolidate Wounds, for Dysenteries, Scourings of the Belly, Spitting of Blood, &c.

[The Shrub which produces the *Cotton*, is the *Gossipium frutescens Annuum*, Park. 1553. *Gossipium frutescens semine nigro*, C. B. Pin. 430. The Seeds are commended by many Authors in various Intentions ; but they are never heard of in the present Practice. The *Cotton* itself is said to do Wonders in the Gout, being burnt upon the Part ; but its Efficacy can be no other than that of Fire, or Quick Lime ; whatever Good attends this Practice being wholly owing to the Burning.]

The *Xylon Arboreum* is never heard of in Medicine.]

51. Of Apocynum, or Dog's-Bane Cotton.

THE *Houëtte*, or *Dog's-Bane Cotton*, is a Kind of *Cotton* taken from the *Pomet*. Husk of a Plant which the *Botanists* call *Apocynum*, which signifies *Dog's-Bane* ; which is represented in the same Plate with the *Cotton* ; this grows plentifully near *Alexandria* in *Egypt*, especially in moist and marshy Grounds, from whence we have what is now sold amongst us. This has no other Use than to fur the Robes of Persons of Quality.

Apocynum Egyptiacum lutescens, siliqua Asclepiadis C. Baubinus, vel Apocynum Syriacum, seu Palaestinum, sive
X *Egyptiacum,*
Lemery.

Egyptiacum, the Syrian, Palestine or Egyptian Dog's-Wort; *Apocynum Egyptiacum floribus spicatis*, Tournefort, Egyptian Dog-Wort, with Spiked Flowers; and by some *Efula Indica*, or the Indian Saurin. This is a Plant which grows in the Nature of a Shrub, with straight Shoots, about four or five Foot high, whose Leaves are long, large, and round as those of Aloes, but without the Spikes, which are the same Leaves with the other Parts of the Plant, and with a white Juice like Milk, that is acid and bitter. The Flowers grow at the Tops of the Branches in the Nature of an Ear, Reddish on'd, indented, and yellow. When the Flowers are gone, a Fruit succeeds as thick as one's Fist, oblong like a large Sheath or Case; these hang two and two upon a hard crooked Stalk; the Fruit is call'd, in Egypt, *Beidelsan*, and is cover'd with two Rinds or Barks; the first or outermost of which, is a green membranous one; the second resembles a thin Skin that has been dress'd or smooth'd, of a Saffron Colour. This Kind contains a stringy or fibrous Matter, like the Moil of a Tree, with which all the Fruit is full, in the Nature of a fine Cotton, that is very soft and white, which is call'd *Houatte*, or *Mallette*. They find in this Cotton Seeds much like those of Pumpkins, but less, reddish, full of a whitish Pulp, and of a bitter Taste. The Root is long, strong, surrounded with Fibres; this Plant is beautiful to the Eye. The Stalk and Leaves are cover'd with a sort of Wooll, and are full of Milk, and grows in Egypt about Alexandria. The Leaves being stamp'd and apply'd as a Cataplasm, are reckon'd proper to resolve cold Tumours. The Juice makes the Hair come off, and is a Remedy for cutaneous Cases used externally. But it is a Poison given inwardly, for it purges with that Sharpness and Violence, that it causes mortal Bloody-Fluxes.

[This Cotton is the Product of the *Apocynum majus Egyptiacum flore luteo spicato*, Breyn. Prodr. 2. 24. *Beidelsan*, or *Beidelsan*, Alp. 36. *Apocynum Egyptiacum floribus spicatis*. El. Bot. 78. It is cultivated in the Gardens of the Curious, and flowers in August. The Leaves are a Poison to Dogs, Wolves, and other Animals.

The *Pseudo Ipecacuanha fusca*, a poisonous Root, brought out of America for the true *Ipecacuanha*, and sometimes unhaply used as such, is the Root of another Species of this Plant, the *Apocynum Euphorum Salicis latiori folio umbellatum scribis Aurantiis*, Pluk. Alm. 36. *Apocynum Canadense angustifolium fere Aurantio*, Hort. Mass. 232.]

52. Of Olives.

We sell at Paris three Sorts of *Olives*, which do not differ but in *Places*. In Spain, and according to the Country from whence they come. Those of *Verona* are much valued, of which there are three Kinds. The next in Goodness are the *Spanish Olives*; and the third Sort are the *Provençal Olives*, which are call'd the *Pichelines*, or the *Paulines*, and very improperly *Black Olives*; for they are not brought from thence.

The Tree that bears the *Olives* is usually small, as may be seen by the Cut of it. As to the Leaves, they are thick and green, the Flowers white, and the Fruit green at the Beginning, but reddish when ripe. I shall not take up your Time to describe the several Works that are made of the *Olive Wood*, but content myself only to speak of the Oil that is made from the *Olives*, and the Manner in which they pickle them for eating.

As soon as the Residents see that the *Olives* are ready to be gather'd for pressing, which is about June and July, they gather them, and carry them to Market as the Country People with us do Cherries. Those who would preserve or pickle them, throw them into fresh Water, and after they have lain there some Time, they take them out, and put them in Brine, which they have made with Potashes, and the Ashes of burnt *Olive Stones*, or *Lime*; and after they have remain'd there a sufficient Time, they barrel them up, according to what Sense best fits them, with a Brine or Pickle of Salt and Water, upon which is thrown a little Essence or Tincture, made of Cloves, Cinnamon, Coriander, Fennel, and other Aromatics. And the whole Knowledge of managing these *Olives* depends upon understanding this Mixture, which they keep as a Secret amongst them.

Choose your *Olives*, especially the *Verona*, new, right or true, firm, and well cover'd with Pickle; for as soon as the Brine or Pickle leaves them, they grow flat and black, and, in a Word, good for nothing; which is of some Consequence, because they are a pretty dear Fruit. For the *Spanish Olives*, they are as big as a Pigeon's Egg, of a pale Green, and bitter Taste, which does not suit every Body; but for the *Provençal*, especially the *Pichelines*, they are reckon'd the best, because it is pretended that Messieurs *Picholini*, of St. Doms's, knew how to pickle them better than other People, which is perhaps no Mistake, since those are the finest and best *Olives*, as they are much greener, and of a better Taste than the *Pauline*, and other *Olives* of *Provence*. They are



Olive



Capers.



Capuchins.



Damask Rose.



currans.



Pear



Chestnut.



Filbert.

of delicate Nutrimēt, stomachick, pectoral, antiscorbutick, gently loosen the Belly, and are chiefly used in eating.

Olea oleus, the Olive-Tree, is of a *Lemery*. moderate Bulk or Size, whereof there are two Sorts, one cultivated, and the other wild. The first is called *Olea Sativa*, by *Dod.* both the *Bauhines*, *Ray*, and *Tournefort*, the planted or cultivated Olive, whose Trunk is knotty, the Bark smooth, of an Ash Colour, the Wood pretty solid, of a yellowish Colour, the Taste a little bitter; the Leaves are longish and narrow, almost like the Willow, pointed, thick, fleshy, oily, hard, and of a pale Green without, and whitish underneath, but without Hair or Down, hanging by short Stalks opposite to one another. There arise betwixt the Leaves, Flowers disposed in white Bunches, that are supported upon Stalks, consisting each of a single Leaf, slit in four Parts, that grows narrower, or contracts itself at the Bottom into a Pipe. When the Flower is gone, there follows an oblong or oval Fruit, green, fleshy, succulent, which is called *Oliva*, or the Olive. This is less or bigger, according to the Place where it grows. That which grows in *Provence* and *Languedoc* is as big as an Acorn; that which *Spain* produces is larger than a Nutmeg: Both Sorts have a little acrid bitter Taste, and contain under the fleshy Part an oblong stony Nut, which has a Kernel enclosed within it. This Tree is cultivated in *Spain*, *Italy*, *Languedoc*, and *Provence*.

The wild Olive is call'd *Olea Sylvestris*, by *Gerard* and *Ray*; or by *Tournefort*, and others, *Olea sylvestris folio duro subtus incano*. It differs from the former in that it is much less in all its Parts, and that the Leaves are much whiter underneath. They grow likewise in the hot Countries, and they pickle them up with Salt and Water to make them fit for eating; for as they are taken from the Trees, they have an unsufferable Taste. They likewise make Oil Olive from them by Expression, as may be seen in *Lemery's Universal Pharmacopæia*. This Oil is emollient, anodyne, resolutive, deterfive, proper for Bloody Fluxes, and the Cholick. The Olives abound with a great deal of Flegm and essential Salt, which they lose in being squeeze'd, or passing through the Press; the Leaves are astringent. The Olive Branch was always the Emblem of Peace, as the Laurel is of Glory. There are certain wild Olives that grow near the Red Sea, that throw forth a Gum very proper to stop Blood, and cure Wounds.

[The Olive is the Fruit of the *Olea sativa* of most Authors; it is common in the hot Countries, and flowers in *June*. The pickled Fruit is much

eaten, but is apt to swell and relax the Stomach too much.

The wild Olive is the *Oleaster* frus *Olea Sylvestris*. Park. 1438. *Olea Sylvestris*. Ger. 1206.

And the Kind mention'd by *Lemery* as growing near the Red Sea, and affording a Gum proper to stop Blood and heal Wounds, is the Gum *Elemi*-Tree, as will be seen in its proper Place.]

53. Of Oil Olive.

BESIDES the Olives, we have a considerable Trade in the Oil, which is *Pamel*. so necessary to Life, that we may bring it in Competition with Bread and Wine. The Way of making Oil Olive is little different from that of Almonds, since there is nothing else necessary towards the making of good Oil, than after the gathering of the Olives, when they begin to redden, that is to say, when they are full ripe, which is in *December* and *January*, to press them in Mills made for that Purpose. The Oil which they produce is sweet, and of a pleasant Taste and Smell; and this Oil is what we call *Virgin Oil*, the most valuable of which is that of *Grasse*, *Aramont*, *Aix*, *Nice*, and some other Places. But as the new gather'd Olives do not yield the Quantity of Oil which those do which lie some Time upon the Floor, those who wou'd have a great deal of Oil, leave the Olives to rot, and afterwards press them; but the Oil which they produce is of an unpleasant Taste and Smell. Some also, to make them yield the more, throw boiling Water upon what remain'd of the first Pressing, which they squeeze over again; and this Oil, made thus, is what we call *Common Oil*, not varying in Goodness, but according to the Places from whence it comes. The best *Common Oil* come from *Genoa*, *Onelle*, and other Parts of *Italy* and *Provence*; and the worst comes from *Spain*, but especially from *Majorca* and *Portugal*.

The Choice of Oil is so well known to all the World, it wou'd be useless to insist upon it. And Oil Olive is so much used, that we have no Sort of Commodity whereof we make a greater Consumption, in that few can be without it; beside that it is of Use in Medicine, as being the Basis of all compound Oils, Cerecloths, Balsams, Ointments and Plaisters. Besides the other great Qualities that are in Oil Olive, I shall not stop to say, that it is a natural Balsam for the Cure of Wounds, being beat up with Wine; and it is of Wine and this Oil, that the *Samaritan Balsam*, with which the Good Samaritan in the Gospel, heal'd the Wounds of the Traveller, is made, which is a Medicine in Use at this Day, as well with the Rich as the Poor. Oil Olive is

also useful for burning, especially in Churches and the like, because it does not stink so bad as other Oils, besides that it lasts longer; but its Dearness makes it that the Poor cannot use it. We likewise have a considerable Trade in *Nut-Oil*, which we have brought us from *Burgundy*, *Touraine* or *Orleans*, which bears a Price, because it is much used by Painters, and other Workmen, as Printers, Rolling-Press Workers, and the like; besides that a great many use it for the Cure of Wounds, as being a natural Balsam. As to its Use for burning, it is a very ill Practice, because it is quickly consum'd, and is reduced to a Coal. We also have considerable Dealings in Oil of Rapes, which we have from *Flanders*, and a common Sort from *Champagne* and *Normandy*. So likewise we have Oil of Hempseed, Camomile and Linseed from *Flanders* and other Parts, especially when Train or Whale Oil is dear. Besides the ripe or compleat Oil of Olives, which is, as I have said, what is press'd out of ripe Olives, and is brought to us frequently from *Florence* as well as from *Genoa*, there is the Oil *Omphacine* press'd out of unripe Olives, for which Reason it is cooling, drying, and binding, used in several Compositions for strengthening the Stomach, healing Exulcerations, cooling the Heat of Inflammations, and repercussing Tumours in their Beginning; hereof is made Oil of Roses, *Omphacine* and Oil of Quinces. The Oil of ripe Olives heats and moistens moderately, whereof the old mollifies more than the new, but the last is best for internal Uses, and loosens the Belly, taken in warm Ale, or the like, to an Ounce. It corrects the Dryness or Huskeness of the Breast, and allays the Pains of the Belly, relaxes the Ureters, cleanses and heals them. It is used with warm Water to provoke vomiting, and cleanse the Stomach. A Linctus is made of it with Syrup of Violets against Hoarseness, Shortness of Breath, and to open Obstructions of the Breast or urinary Passages. It is used in Clysters to loosen the Belly, and mollify the harden'd Excrements. The distill'd *Oil Olive* is that which is call'd Oil of Bricks, which is a subtil and piercing Oil, and of great Virtues, but not much used, because it stinks so egregiously, though good in both Gout and Palsy.

[*Olive Oil* is an excellent Ingredient in Ointments and Cataplasms, intended as Ripeners, in which it acts by relaxing the swell'd Part: But it is little used inwardly, because of the greater Sweetness and Excellency of the Oil of Almonds.]

54. Of Soap.

BESIDES the great Consumption made of Oil Olive for Works in which it is necessary, for different Foods and for Physick, it is the Basis of several Sorts of Soap which we sell; I mean of the best Sorts, the most valuable of which is the *Alicant Soap*; the next the *Carthagena*, the third is the true *Marseillis Soap*; the fourth that of *Gayatte*; the fifth the *Toulon Soap*, which we falsely call *Genoa Soap*. All these Soaps are Compositions of Oil Olive, Starch, Lime-Water, and a *Lixivium*, or Lye of Pot-Ashes, mix'd all together by boiling into a Paste, which is made into Balls or Cakes, in the Form and Figure as they are brought to us. As to the Mixture of their Green and Vermillion I shall say nothing, it being a Secret the Soapboilers keep among themselves; nevertheless I have been assur'd that they use Red Oker, Copperas, and the *Caput Mortuum* of Vitriol, call'd *Colcothar*; but as I am not certain, I shall say nothing further of it.

The Choice of Soap is to have it dry, well marbled or stain'd, and true from the Place whence it derives its Name: that is to say, that such as is sold for *Alicant*, be true *Alicant*, and so of the rest. The *Toulon Soap* shou'd be dry, of a white, tending to a little bluish Colour, cut even, glossy, and of a good Smell, and the least fat or oily that can be. As to the marbled Sort, that which is of a red Vein on the Side, and of a fine Green and Vermillion within, is most esteem'd, because it is best mark'd, of most Use, and the best Sale. As to the Virtues of Soap, they are well enough known; but as few will imagine it is of any great Use in Medicine, I must nevertheless declare, that it is used with Success in the Cure of cold Humours, being dissolv'd in Spirit of Wine; and there is a Plaster compos'd of it, call'd the *Soap Plaster*, which has very great Virtues, as many Authors do affirm. Besides the Sorts of Soap that I have been speaking of, there is a Kind made at *Rouen*, which is made with a certain Grease that is found upon the Kettles and Pots of the boiling Cooks; but as this is a very bad Soap, I shall say no more of it. We sell a liquid or soft Soap, which we call *Black Soap*, made at *Abbeville* and *Amiens*, of the Remains of burnt Oil; but as this Soap is of a brown Colour, there comes from *Holland* a Sort something like it, but green, because instead of the burnt Oil they make Use of Hemp-Oil, which is green. The *Black Abbeville Soap*, which we sell in little Barrels, is much in Use amongst the Cap-Makers, and several other Workmen or Artificers. The green, liquid, or soft

soft Soap from *Holland*, is used by several to rub on the Soles of the Feet of such as are in Fevers, and is said to be a Cure; the Use of this ought not to be entirely rejected, since I have known Persons who have been cured by it. But as this Soap is very scarce in *France*, since none comes there in Time of War, they must content themselves with that of *Abbeville*.

[The Kinds of Soap we have in Use in *England* are,

1. The *Common Soap*, which is made of coarse Oil, Swet, and a Lixivium of Pot-Ashes, of each an equal Quantity, boil'd to the Consistence we see it of.

2. *Black Soap*, which is made by adding Soot to the former Composition.

3. *Castile Soap*; this is made like the common Soap, only a better Oil is used, and it is boil'd to a higher Consistence and better mix'd; this is colour'd in Streaks with Indigo. And

4. *Venice Soap*, which is altogether white, something softer than the *Castile Soap*, and made of the best Oil of any of the four.

All of them are Diureticks and Deobstruents; the properest for internal Use are the *Venice* and *Castile*.

55. Of Capers.

Pomet. CAPERS are Buds of Flowers which grow upon a Plant that is a Shrub, about *Toulon* and other Parts of *Provence*, from whence come almost all the Capers we now sell. They likewise come from *Majorca*, as you will find hereafter.

We sell several Sorts, that scarce differ but as to their Size, and not from the several Countries from whence they take their Name; for 'tis a certain Truth, that all the Capers eaten in *Europe*, except those of *Majorca*, come from *Toulon*; so that instead of being call'd *Nice* or *Genoa Capers*, as they always have been, they ought to be call'd *Toulon* or *French Capers*. When they are ready to be gather'd, it ought to be done in four and twenty Hours; for if they are not gather'd exactly during the Time of budding, they open themselves, and are neither proper for pickling or making Vinegar: When the Peasants have gather'd their Capers, before they pickle 'em, they run 'em through Sieves whose Holes are of different Sizes, by which Means they have Capers of several Sorts, which nevertheless come from the same Plant. The lesser Capers, and such as have their Stalks on, are the most valued. As to the *Majorca Capers*, they are little salted ones, whereof there is some Sale in Times of Peace. At *Lyon* they eat another Sort of flat Capers, with a

rank salt Taste; yet this Sort being seldom or never demanded, we sell but very few of them; but much more of two other Sorts of Flowers pickled in Vinegar, one whereof is call'd *Mexis Hood*, and the other *Broom*, or *Broom Buds*; which Plants are so well known, they need no Description.

Capparis spinosa fructu minore, folio rotundo; the Round leav'd Caper with Lemery. the less prickly Fruit. This is a little Shrub, furnish'd with crooked Prickles; the Branches are bending, the Leaves round, and something bitter to the Taste. It bears Sprigs, or little distinct Stalks, carrying on their Tops small Heads, or green Buds, which are gather'd when at their full Growth, before they are blown, to pickle for preserving: When the Bud is full blown, there appear four white Leaves like a Rose, supported on a Cup likewise of four Leaves, in the Middle of which rises a Spire that ends in a Bud. When the Flower is gone, this Bud, according to M. *Tournefort*, produces a Fruit whose Shape resembles that of a Pear, which encloses in its Pulp several small Seeds, lodg'd each in a small Nich or Corner. The Roots are long and thick, from whence the Rind is separated to dry; it ought to be thick, hard, whitish, difficult to break, and of a biting Taste. The Caper-Tree, or Shrub, is cultivated in *Provence*, especially about *Toulon*.

There is another Species or Kind of Caper, which differs from that we have been speaking of, in that it is not prickly, and that the Fruit is larger. It is call'd by *Cass. Bauhinus*, *Capparis non spinosa fructu majore*; the Caper without Prickles, with the larger Fruit. This grows in *Arabia*, of the Height of a Tree, and retains its Leaves all Winter. The Caper, and the Bark thereof, are both used in Physick, and yield a great deal of essential Salt and Oil. They excite or promote an Appetite, strengthen the Stomach, are aperitive, and particularly serviceable in Diseases of the Spleen. The Bark of the Root is very aperitive, and proper to open Obstructions of the Spleen and other Viscera, to dissipate Melancholy, and resist Poison. The Pickle is used as Sauce with Meat, and is made of Vinegar, Salt-Water, and a proportionable Quantity of Spirit of Wine, which preserves the Pickle and the Things pickled.

[Capers are the Flower-Buds of the *Capparis Rotundifolia*. Ger. 748. *Capparis spinosa folio rotundo*. Park. 1023. The Bark of the Root is used in Medicine as an Aperient.

The Buds, preserv'd in Pickle, are eaten as a Sauce; they are gather'd for this Use just before the Time of their opening into Flowers, and laid in

in the Shade for three or four Hours, 'till they begin to wither, that they may not open; they are then put into a Vessel and cover'd with Vinegar, in which they are suffer'd to lie eight Days; that is then pour'd off and fresh Vinegar put on, and left for eight Days more; that is then pour'd off and they are put into Barrels with fresh Vinegar, and kept for Use.]

56. Of Bay-Berries.

Pomet. **B**AY-Berries are Fruit of the Bigness of one's little Finger's End, green at the Beginning, and which grow browner as they ripen: These Berries are as well known as the Tree that bears them, of which it wou'd be needless to give a Description; I shall therefore only observe, that they ought to be chosen fresh, well dried, the best fed, and the blackest that can be; take this Precaution, that they be not worm-eaten, to which they are very subject.

These Berries are of some Use in Physick, but more considerably with the Dyers and the Farriers. They are much used in *Languedoc*, where an Oil is made from them, as I shall shew in the next Chapter; and though they grow plentifully in several Places of the *Streights*, yet they are brought to us from *Port O Port*, of a blackish brown Colour, having a Kind of hot oleaginous Taste. They are cephalick, neurotick, alexipharmick, and anticolick; they mollify, discuss, expel Wind, open Obstructions, provoke Urine and the Terms, facilitate the Travel of Women in Labour, and help Crudities in the Stomach. They are good for the Nerves in Convulsions and Palsies, give Ease in the most extreme Cholicks, and take away the After-Pains of Women in Child-Bed; they are used in Powder, Decoctions, Tincture, Spirit, Electuary, Plaister, and Oil; the last of which is made by Distillation, which discusses Wind, cures the Cholick, Cramps, Convulsions, Palsies, Pains, old Aches, Gout, Lameness, Numbness, Sciatica. Dose inwardly, from four Drops to six; outwardly, a Drop or two put into the Ear, helps the Hearing. It is also excellent for Diseases of the Skin; as Dandriff, Morpew, fore Heads, Scabs, &c.

Laurus, or *Laurus Vulgaris*, the Bay, *Lenery.* is a Tree which grows usually of a moderate Height in temperate Climates, but which rises higher in the hot Countries, as in *Italy*, *Spain*, &c. The Stem is smooth without Knots; the Bark something thick, the Wood porous and easy to break; it bears long Branches, and its Leaves are the Length of one's Hand, two

or three Fingers broad, pointed, hard, always green, a little succulent, stringy, smooth, and fragrant, of an acrid, aromatick Taste, and a little bitter, tied by short Stalks; the Flowers are each of a single Leaf cut into four or five Parts, of a white or yellowish Colour, succeeded by Berries of the Bigness of a small Cherry, oblong, green at first, but brown as they grow riper. These Berries are odoriferous, aromatick, oily and bitter; the Roots thick and uneven; the Tree grows in hot dry Places, and is cultivated in Gardens; the Leaves are useful in Medicine, and yield a good deal of Oil and volatile Salt.

[Bay Berries are the Fruit of the *Laurus vulgaris*. C. B. Pin. 460. *Laurus domestica tenuifolia*. Jons. Dendr. 229. It is common in Gardens, and flowers in April.

There is another Species of this Tree mention'd in some Catalogues of Official Trees, and there call'd the *Laurus latifolia*; which is the *Laurus latifolia platytera Dioscoridis* C. B. Pin. 460. *Laurus major sive latifolia*. Park. 1486. The Leaves of this are more fragrant than those of the common Kind, and have been given in Powder to cure Agues.

The Berries of this are not used in Medicine; the Berries of the common Bay are carminative and discutient; their principal Use is in Clysters.]

57. Of Oil of Bays.

THE Oil of Bays, or *Olium Laurinum*, is an Oil made of the Bay-Berries, by bruising them and boiling them in Water; when it is cold it is barrel'd up to be transported to several Places. That which is mostly sold in *France*, is brought from *Provence* and *Languedoc*, especially from a Place call'd *Cabussan*, near *Montpellier*, from whence we have the best; for that of *Provence* is nothing else but Fat and Turpentine colour'd with Verditer or Nightshade Juice; therefore use none but that from *Languedoc*, as being the best of all, when it has all its requisite Qualities, which are to be new, well scented, granulated, and of a green Colour, tending something towards a yellow; and meddle not with that which is green, smooth, liquid, and of another Smell than the Bay, such as that of *Provence*, or what is made at *Lyons*, *Rouen*, or *Paris*, by knavish People, who have no Conscience, but wou'd impose their Rubbish upon the World for a good Commodity. Such are those who counterfeit and sell *Rosin* for *Scammony*, *Arcanon* for *Gum Guaiacum*, fat Pitch for *Benjamin*, and Kitchen-Stuff discolour'd with green for Oil of Bays, Turmeric for Saffron-

Saffron-Powder, and Honey boil'd up with a Hodge-Podge of powder'd Roots for Treacle; and in a Word, all Sorts of Drugs sophisticated to deceive the Publick, and to make a better Advantage than their Fellow-traders; which is a Thing I fear too much practis'd all over *Europe* as well as in *France*.

[The Method of making this Oil is thus: Gather the *Berries* when ripe, and bruise them in a Marble Mortar, boil them in as much Water as will keep them from burning, and after half an Hour's boiling, put them into a Press; when all is squeez'd out that will run, take out what is left in the Bag, and beat it, and boil it again with more Water, then press as before.

The Oil will be found swimming on the Water press'd out, and must be taken off with a Spoon, and kept for Use.]

58. Of Damascus Raisins.

THE *Raisins* call'd the *Damascus Raisins*, are flat, of the Length and Thickness of one's Thumb's End; we have them brought from *Damascus*, the Capital of *Syria*, in roundish Boxes. Chuse the newest, largest, and best sed, and beware they are not *Calabrian Raisins*, as it happens but too often with several Grocers, who make no Difficulty to sell the one for the other, or Jubes flat-ter'd, and put up on Purpose in *Damascus Raisin Boxes*, which are nevertheless easy to be distinguish'd, because the *Damascus Raisins* are thick, large, fleshy, dry and firm, and have commonly two Kernels; they also are of a faint disagreeable Taste, which those of the *Calabrian Kind* are not, but are of a fat, soft, and sweet sugary Taste, as are also the *Jube Raisins*.

The *Damascus Raisins* are much us'd in Pectoral Ptisans, and Decoctions, and are frequently join'd with Jujubs, Sebestens and Dates; likewise in Syrup of Marsh-Mallows, in the healing Lohoch, Lenitive Electuary, Confection of Hammech, and in the Electuary of Fleawort. *Raisins* are nothing else but Grapes dipp'd several Times in boiling Water, and dry'd in the Sun. *Damascus Raisins* are most approv'd of; but we commonly use those that are prepared at *Narbon* in *France*, and out of which there is a strong Spirit extracted, or a good Sort of Brandy; they are endued with much the same Properties as Figs. Take *Raisins* of the Sun half a Pound, boil them in a sufficient Quantity of generous Wine, pulp them through a Hair Sieve, and add two Ounces of Hyssop in Powder, of the cooling Species, or Powder of Pearls one Ounce, and make an Elec-

tuary, to be taken to the Quantity of two Drams, in an Asthma.

[The *Damascus Raisins* are the Fruit of the *Vitis Damascena*. Hort. Reg. Par. 186, Tournef. Inst. 613. They are the largest, fleshyest, and firmest *Raisins* we know of, and are the properest of all others to be us'd in Pectoral Decoctions.]

59. Of Currans.

THE *Raisins* of *Corinth*, or *Currans*, are little *Raisins*, or *Grapes*, of *Pomet*. different Colours, being Black, Red and White, and commonly the Size of the red Gooseberry: The Vine that bears this is low, furnish'd with thick Leaves very much indented, and grows plentifully in a vast spacious Plain that is situated behind the Fortrefs of *Zant* in *Greece*. This Plain is surrounded with Mountains and Hills, and is divided into two Vineyards, in which are abundance of Cypresses, Olives, and Houses of Pleasure, which make, together with the Fortrefs and the Mount *Discoppe*, a Prospect perfectly beautiful.

When these little *Raisins* are ripe, which is in *August*, the People of *Zant* gather and stone them, then spread them upon the Ground to dry, and when dry'd carry them into the Town, where they are thrown through a Hole into great Magazines, call'd *Seraglias*; where they are queez'd so close by their Weight, that those who own them are oblig'd to use Iron Instruments to pull them out, and when they are pull'd out they put them into Casks, or Bales, of different Bigness; and to make them so tight as they are brought to us, they employ Men to tread them with their Feet, which they rub well with Oil beforehand.

Sometimes also we have these *Raisins* from *Natolia*, *Lepanto*, *Messalangi* and *Patras*, as well as *Corinth*, from whence they take their Name: The *English* have a Factory at *Zant*, govern'd by a Consul and six Merchants, to carry on their Commerce, which brings in no small Advantage, for they consume more *Currans* in a Year than all the rest of *Europe*. The *Dutch* have a Consul and two Merchants, and the *French* a Commissary that does the Duty of the Consul and Merchants under one. The People of *Zant* believe to this Day that the *Europeans* use these *Raisins* to dye Cloths, not knowing that they are for eating.

The Fruit is so common upon the Spot, that they sell not for above three Livres a hundred Weight; but they pay as much also to the *Venetians* for Leave to export them; so that at *Mar-seilles* they are not sold under nine or ten Livres, according to the Crop and Hazard of the Sea; the

the *English* and *Dutch*, when the Seas are free, bring them plentifully from thence to *Bordeaux*, *Rochelle*, *Nantes* and *Roien*, where we buy them at an easier Price than at *Marseilles*. Chuse such as are the newest and freshest, small and in a close Mass, unpick'd and not rubb'd over with Honey. They open Obstructions, and nourish much, being of excellent Use to restore in Consumptions and Hecticks; they are good in Coughs, Colds, or Asthmas, either in Decoction, Honey, Syrup or Conserve.

Vitis Vinifera, the Wine-bearing *Lemery*. Vine, is a Shrub whose Stem, or Stalk, is winding or crooked, cover'd with a cracking Bark, reddish, bearing several long Shoots, furnish'd with Wires, that creep and cling to the neighbouring Trees or Props. The Leaves are large, fair, broad, almost round, jagged and cut in, green, shining, and a little rough to the Touch. The Flowers are little, composed usually of five Leaves each, disposed round, of a yellowish Colour, and fragrant. The Fruit are round or oval Berries, pressing close one against the other in a thick Bunch, green and sharp at the Beginning, but in ripening they become of a white, red or black Colour; and are fleshy, full of a sweet agreeable Juice. They are call'd in *Latin*, *Uvæ*, and in *French*, *Raisins*, as we now call them when dry.

When in Spring Time they cut the Tops of the Vines there naturally distills, or drops, a Liquor in Tear, call'd *the bleeding of the Vine*, and in *Latin*, *Aqua Vitis*: which is aperitive, detensive, proper for the Stone and Gravel, being taken inwardly: The Eyes are likewise wash'd with it to clear the Sight.

The Vine Buds, tender Leaves and Clingers, which they call in *Latin*, *Pampini seu Capreoli*, are astringent, cooling, proper for the Flux of the Belly and Hemorrhages, being taken in Decoction; they are likewise made into Fomentations for the Legs, and to procure Rest. The Shoots and Wood of the Vine are aperitive, being made into a Decoction. The *Raisins*, while green, are call'd in *Latin*, *Agræstæ*, being astringent, cooling, and provoking to an Appetite: when ripe they quicken the Stomach, loosen the Belly, and when press'd become Must, which is afterwards made into Wine.

Raisins are either dried in the Sun or before the Fire, to deprive them of their Flegm, and make them capable of keeping; they are call'd *Uvæ Passæ*, *seu Passulæ*, or dry'd *Raisins*. There are several Sorts, all prepared after the same Manner as the large, which are call'd *Uvæ Damascenæ*, or *Damask Raisins*, and the small call'd *Uvæ Corinthiacæ*, the *Corinthian* Grapes, or *Currans*:

They are all proper to sweeten the Asperity of the Breast and Lungs, to soften the Bowels and relax the Belly, and to promote Expectoration, being cleansed from their Stones, which are astringent.

The Husk, or Skin of the Grape, which remains after the last Expression, from whence they draw the Must, is call'd in *Latin*, *Vinacea*: They throw this on Heaps, to the End that it may ferment and grow hot; then they wrap it round the Member or the whole Body of the Patient afflicted with the Rheumatism, Palsy, or Hypogout, to make him sweat, and to strengthen the Nerves; but it sometimes raises the Vertigo, by Means of the sulphureous Spirit that ascends to the Brain.

[The *Damascus Raisins* were spoke of in the last Chapter, and the *Currans*, or *Corinthian Raisins*, are the Fruit of the *Vitis Corinthiaca* *five* *Apirena*. J. B. 2. 72. Boerh. Ind. Alt. 2. 232. They are not much used in Medicine, unless sometimes in Broths and Gruels, to ease and relax the Bowels.]

60. Of Jube Raisins.

THE *Jube Raisins* are a Kind which we have brought from *Provence*, especially from *Roquevarre* and *Ourol*: When the Grapes are ripe they gather the Bunches, dip them in Lye made hot, and afterwards put them upon Hurdles, and the like, to dry in the Sun, turning them from one Side to the other, by which Means they dry equally; and when they are dry they put them up in little Chests of white Wood, such as they are brought over in: To answer the Quality requir'd, they ought to be new, dry, in fine Bunches; that is to say, the least fat and stony that may be, but clear and bright, of a sweet Sugar Taste.

There are other Sorts of *Raisins*, which we call *Picardans*, which are much less, drier, and skinnier: In a Word, worse than the *Jubes*. We sell great Quantities of *Calabrian Raisins*, which are fat and of a very good Taste: As also the *Maroquins*, which are black *Raisins*; the *Raisins* of the Sun which come from *Spain*, which are those whereof they make their *Spanish Wine*; these are dry'd red and bluish, and of a very good Taste. The *Spanish Raisins*, of the lesser Sort, are something larger than those of *Corinth*.

Beside the *Raisins*, there is a very great Trade in the different Wines; as those of *Spain*, *Alicant*, *St. Laurence*, *Frontignan*, *Hermitage*, *Bur-bataune* or *Languedoc*, and several others; and as great in Brandy, which we have from *Cognac*, *Blais*, *Saumur*, and other Parts; besides which, there

there are several other Kinds of Brandy, made from Beer, Cyder, Fruits, Sugar, Corn, &c. but as they do not properly relate to this Head I shall pass them by.

The Use of Brandy is so common at this Time we have no Occasion to enter into a Detail of it any further than as it relates to Medicine, in which it is used to strengthen the Nerves, abate Pain, refresh the Spirits, and dispose the Parts to Perspiration. We make from Brandy, by an Alembick, a spirituous Liquor that is clear and transparent, call'd Spirit of Wine; which, if good and true, ought to be white, and, when set on fire, to burn off without any Moisture remaining. The best Way to know whether it is truly de-flegmated, is to try it with Gunpowder in a Spoon; if it burns dry, and afterwards fires the Gunpowder, it is an infallible Sign of its Goodness.

[*Raisins* are the dry'd Fruit of the *Vitis Vinifera*, J. B. 2. 67. Mont. Ind. 55. brought from different Countries: Those used in Medicine with us are the *Raisins of the Sun* and those call'd *Malaga Raisins*; the first of which are not suffer'd to ripen regularly, but the Stalk that supports the Bunch is cut half through when they have attain'd about half their Bigness, so that they receive afterwards but a Part of the Juices they otherwise would; and when they are become dry enough, by the want of Juices and the Heat of the Sun, they are cut down and preserved for Use.

The other Kind, or *Malaga Raisins*, are suffer'd to ripen naturally, and afterwards dried in the Shade.

In all detergent and purging Compositions the *Raisins of the Sun* ought to be used; and in all Pectoral and Vulnerary, the *Malagas*.

The Wines used in Medicine are ten. 1. *Canariense*, Canary Sack. 2. *Malacense*, *Malaga* Sack. 3. *Xeranthum*, Sherry Sack. 4. *Alo-nense*, *Alicant* Wine, commonly call'd Tent. 5. *Portuense*, *Porto Port* Wine, the Red and the White. 6. *Ulyssiponense*, *Lisbon* Wine. 7. *Gall-icum Album*, French White Wine. 8. *Gall-icum rubrum* *Claretum dictum*, Claret. 9. *Rhe-nanum*, Rhenish. And 10. *Cretica sive Mes-chatellina rubra*, Red Muscadine, which is commonly sold for Tent.]

61. Of White and Red Tartar.

Pomet. **TARTAR** is a Sort of Stone which is found sticking to the Casks of white or red German Wines, and is de-nominated according to the Place from whence it is brought. The finest *Tartar* is that of Germany,

because of its Thickness, which is owing to the Time that it remains in the Casks. It ought to be thick, easy to break, white without and brilliant within, and as little earthy or dreggy as may be; and the Red is the better the nearer it approaches to the former. The next Sort is what comes from *Provence* and *Languedoc*, which comes nearest to that of the *Rhine*. The third Sort is what we now call the *Gravel of Lyons*, which differs not from that of *Paris*, save only that it is a little thicker and of a higher Colour. The Use of *Tartar*, and the *Gravel*, is for the Dyers, Goldsmiths and Refiners, to whiten Silver; and likewise for several Chymical Operations mention'd hereafter: The White is preferr'd to the Red, as being much better.

62. Of Crystals of Tartar.

THE Cream, or *Crystals*, of *Tartar*, is a white or red *Tartar* reduced to Powder, and by Means of boiling Water converted into little white *Crystals*, after the Manner as will be shew'd hereafter. The best Cream of *Tartar* is brought us from *Montpellier*, and other Parts about *Nismes*, where they make great Quantities; but the last is less fine than that of *Montpellier*.

To purify *Tartar*; take good white *Crystalline Tartar*, ten Pounds, beat it into fine Powder, and dissolve it in six Gallons of boiling Spring Water and continue the Boiling 'till it is dissolved; then presently strain it hot through a Bag, and stir the strained Liquor constantly round with a wooden Slice 'till it is cold; then let it rest, and in two or three Hours after the pure and fine *Tartar* will sink to the Bottom of the Vessel, in the Form of a shining Powder. This *Tartar* is good to attenuate and dissolve gross and tartarous Humours, which cause Obstructions in the Regions of the Belly, Liver, Spleen, Mesentery, Pancreas, Reins and Womb. It is an universal Digestive and Doopillative, and for this Reason is commonly given as a Preparative to stronger Purgations; and it is good for all such as are naturally hot and costive, and do not easily go to Stool, gently opening and loosening the Bowels, without offending the Stomach or disturbing the other Functions of Nature. Dose from two Drams to half an Ounce and upwards.

For crystallizing and making Cream of *Tartar*: Dissolve what Quantity you please of the best white *Tartar*, in a large Quantity of boiling Water; which Liquor pass hot through a Bag, into an earthen or glass Vessel; evaporate about half of it away, and then set it in a cool Place to crystallize for two or three Days; evaporate again half the Liquor, and crystallize again, 'till you have

have got all the Crystals. What swims on the Top is call'd the Cream of Tartar, and the Shooting on the Sides are call'd Crystals of Tartar. The Virtues of both these are the same with the former, being aperitive and purgative, good for cachectical, hydropical, and asthmatical Persons, and excellent against *Tertian* and *Quartan Agues*; and the Dose and Way of giving are the same.

63. Of Soluble Tartar, or the Vegetable Salt.

THE *Vegetable Salt*, or *Soluble Tartar*, is made from the Cream and Salt of Tartar dissolv'd together; it is lately come into Use, and is said to be the Invention of *Friar Auge*, the Capuchin; the Sale of which has been incredibly great. Take Crystals of Tartar in Powder, eight Ounces, pure Salt of Tartar four Ounces; mix them, and, in a glaz'd earthen Pipkin, put upon them three Pints of pure Spring Water; boil it gently for half an Hour, then letting it cool, filtrate, and evaporate to Dryness, so will you have eleven Ounces and six Drams of a white Salt, which keep in a Glas close stopp'd for Use: This will dissolve in any cold Liquor, and is call'd the *Vegetable Salt*; it has all the Virtues of purified Tartar foregoing, and may be given from a Scruple to a Dram, in any proper Liquor; but because this Remedy is appropriated to open Obstructions of the Liver, Spleen, Womb, &c. and that Iron is one of the chief Specificks for this Purpose, you may by the following Method unite the two Ingredients into one.

64. Of Chalybeated Tartar.

TAKE of the purified Tartar beforemention'd, one Pound; clear Filings of Iron or Steel two Ounces; pure Rain Water, eight Pints; boil all in a clean Iron Kettle, as long as you boil an Egg for eating, or somewhat longer; then pass it thro' a Woollen Strainer, and stir the Liquor 'till it be cool'd, and you shall have a Powder of a *Chalybeate Tartar*, of a greenish Colour, and shining when dry, containing in it the Vitriol of *Mars*. This is incomparably more aperitive than the foregoing Preparations, and has all the Virtues of them exalted to a high Degree, and therefore a most prevailing Thing against the Green-Sickness, and other hysterick Diseases; but if you prepare it of the purified Tartar that is soluble, it will easily dissolve in any Liquor, and so be more fit for Use. Dose from half a Scruple to half a Dram. *Note*, That the Artift had best prepare the purified Tartar of which this

is made, by itself, because most of what is sold in the Shops is adulterated with Alum or Nitre, or both: Or you may make it thus:

Take of Tartar crystalliz'd one Pound; Rust of Iron, three Ounces; Water, six Quarts; boil all together for half an Hour, or so long as to dissolve the Tartar; strain it hot thro' a Bag into an Iron Kettle, and in twelve Hours it will shoot into browh Crystals at the Sides and Bottom of the Kettle; decant the Liquor, evaporate it half, and set it to crystallize again in the former Kettle: Continue these Operations 'till you have all your Tartar, which dry in the Sun, and keep for Use. It is a good Remedy for Obstructions, especially against *Quartan Agues*, having all the Virtues of the purified Tartar, but much more powerful. Dose from fifteen Grains to two Scruples, in Broth or other proper Liquor.

65. Of Soluble Tartar chalybeated.

TAKE of Tincture of *Mars*, one Pint; of the purified soluble Tartar, four Ounces; mix, dissolve by boiling, and evaporate to Dryness; so will you have eight Ounces of a soluble chalybeate Tartar in a black Powder, which keep for Use in a Glas close stopp'd. It has all the Virtues of the chalybeate Tartar before, and of the Tincture of *Mars*, being powerful to remove all Kinds of Obstructions, cure Cachexies, Dropsies, nephritick Cholicks, Obstructions of Urine, and Stoppages of Terms in Women. Dose from ten Grains to thirty.

66. Of Emetick Tartar.

TAKE purified Tartar, or Crystals of Tartar in Powder, four Ounces; Spirit of Urine, or *Sal Armoniac*, as much as to cover it two Inches; mix and dissolve; then add Glas of Antimony in fine Powder, one Ounce; pure Spring Water, ten Ounces; boil in a Sand Heat seven or eight Hours, putting in more Water as the Liquor consumes; then filtrate and evaporate to Dryness. Or thus; Take of the soluble Tartar, four Ounces; Glas of Antimony in fine Powder, one Ounce; fair Water, a Quart; mix and boil seven or eight Hours, putting in more Water as the Liquor consumes; then filtrate and evaporate to Dryness, so will you have a grey Powder, which is a good Emetick.

It is a most powerful Thing against chonical Diseases, disposing the Patient to Health; it prevails against melancholy Madness, Frenzies, Deliriums, and particularly against all inveterate Pains of the Head, whether *Idiopathetick*, or by Consent of Parts; it is powerful against the Vertigo,

tigo, Epilepsy, Apoplexy, Difficulty of Hearing, Ringing and Noise in the Ears, Loss of Memory, Nauseousness and Loathing at the Stomach, Weakness thereof, Want of Appetite, Wind and Pain in the Stomach and Bowels, the Yellow Jaundice, Dropsy, tedious and long continued Tertian and Quartan Agues, putrid and acute Fevers, Poison immediately receiv'd, a bilious Pleurisy, and all Diseases arising from Cholera, virulent Dysenteries, and the like. It is an Emetick that works with little Violence, and may be given from five Grains to fifteen, in Mutton, Chicken, or Veal Broth.

67. Of the Distillation of Tartar.

THE Distillation of Tartar is made *Pomet.* by the bruising white or red Tartar to a Powder, and putting it in an earthen Retort, to draw off, by the Force of the Fire, a Flegm, which is a white Water, without Taste, and is to be thrown away. When the Flegm is separated, there comes over a reddish Water, which is the Spirit of Tartar, and after that a black Oil that is foetid and very thick, which is what we call black Oil of Tartar, or Oil of Tartar by the Retort. That which remains in the Retort like Coal, after having been calcin'd and whiten'd, by the Means of hot Water, is made into a very white Salt, which is the true Salt of Tartar. The Spirit of Tartar rectified, that is to say, distill'd or drawn over again, is very proper to cure the Epilepsy, Palsy, Asthma, and Scurvy. The Dose is from one Dram to three, in a convenient Liquor.

The black Oil of Tartar by the Retort is admirable for the Cure of Scabs, and is a good Medicine in all the Cases before-mention'd; but as it is too foetid, they rectify it with dry'd Clay before they make use of it. The Salt of Tartar is necessary to make the vegetable Salt with; and is beside something considerable in Physick, as well to take out the Tincture of Vegetables, and to make the white Oil of Tartar, call'd the *Oleum Tartari per Deliquium*, or Liquor of Tartar.

Most of those who make the Salt of Tartar never trouble themselves about drawing off the Spirit or Oil, but only calcine the red Tartar over a Coal Fire, 'till it comes to a Whiteness, and so extract the Salt, and put it up into Bottles for Use. The true, fix'd, or alkaline Salt of Tartar ought to be pure, white, dry, piquant to the Taste, attended with a little Bitterness; and when it is thrown on a Coal Fire, not to sparkle at all.

Abundance of Chymists, especially the meaner Sort, sell a Salt of Tartar made with Salt-petre,

which takes the Eyes of those who know no better, in that it is extremely white; but the Use of it is very improper in the Place of true Salt of Tartar; the Cheat is easy to discover, because this will sparkle upon the Fire, which the true will not do.

They make of the true Salt of Tartar, after they have set it in a Cellar, a white clear Liquor, which is what we improperly call Oil of Tartar *per Deliquium*; for it is only a dissolv'd Salt. Those who would make this Oil, may take the calcin'd Tartar, and place it in a Cellar or Vault, in a Glass hung up in the Air, and the Oil which flows from it is clear and fine as if it had been made from the Salt. There are some People who make this Oil by dissolving Salt of Tartar with Water, and sell it for true Oil; but it is weaker than that made the true Way, and is something reddish.

This Oil has the same Virtues with the Salt, as it is indeed only the Salt in a Liquid Form. The Dose is from ten to thirty Drops.

68. Of Tincture of Salt of Tartar.

THE Tincture of Salt of Tartar is made of Salt of Tartar that has *Pomet.* undergone the strongest Degree of Fire, and afterwards is dissolv'd in Spirit of Wine tartariz'd, which, after it has stood in Infusion some Time, is pour'd off, or decanted into a Bottle to be stopp'd and kept for Use. This Tincture, when rightly prepar'd, ought to be of a good Red. It is used in Physick chiefly for the Scurvy, and to cleanse the Blood. Dose from twenty to forty Drops. It is observable, the better Colour this Tincture is of, the better it is prepar'd; and the older it grows, the more decay'd and fainter the Colour is.

69. Of Tartar Vitriolate.

Magistery of Tartar, or Tartar Vitriolate, is composed of Salt of *Pomet.* Tartar, or Oil of Tartar *per Deliquium*, and good Spirit or Oil of Vitriol mix'd together, and dry'd by a Sand Heat to a very fine white Salt, which ought to be as dry and light as possible; but take care that it be not made of Cream of Tartar boil'd in Spirit of Vitriol, as happens too often, and sometimes of Salt-Petre or Crystal Mineral: That made with Cream of Tartar is easy to discover, when not in Powder, by the Hardness of the Grains met with in it; and the last, because it will sparkle on the Fire, and easily dissolve. This is frequently used in Physick as a good Aperitive, &c. and ought to

be kept in a Glass Vial close stopp'd, because it is apt to run to Water.

70. Of the Volatile Salt of Tartar.

Pomet. **T**HE Volatile Salt of Tartar is made from the Lees of White Wine express'd and dry'd in the Sun, or otherwise, put into a Retort and distill'd with a gradual Fire: Mr. Charas was the first who prepar'd this Salt in the true Manner. This Volatile Salt is of a strong diaphoretick Nature, but is more particularly aperitive and diuretick; it ought to be very white, and of a Smell almost as quick and penetrating as the Volatile Salts of Animals. It may be given to five or six Grains in good Wine or other Liquors.

71. Of the Gravell'd Ashes.

THE Gravell'd Ashes are the dry Wine Lees calcin'd; that this may have the due Quality it ought to be in a Stone, new made, of a greenish white Colour, and of a saltish bitter Taste. This is used by the Dyers and other People, that have occasion for it; and the best is that which comes from Burgundy, because it is made of the best Wine Lees, and therefore must needs be much better than what our Vinegar-Brewers make.

As this is Wine Lees calcin'd, they make a Salt from it by Means of hot Water, which has the very same Virtues with Salt of Tartar, except that it is more corrosive, as well as the Oil *per Deliquium* that is made from it. This is also employ'd with quick Lime to make a Salt, which, after it has been fus'd in a Crucible, is cast upon a Stone, or into a Basen, and after it is cold, is cut into little Tablets, and put into a Bottle well stopp'd; and these little Stones are true Caustick Stones. There are some likewise made with Oak-Ashes, Alum, and quick Lime, by the Assistance of hot Water and Fire; and these are call'd Velvet Causticks, because they operate more gently.

Tartarum, or Tartar, is a hard stony or crusty Matter, which is found sticking to the Insides of Wine Casks: This Tartar is composed of the grossest and most saline Part of the Wine, which is separated by Fermentation, and harden'd to a stony Substance on the Sides of the Cask. There are two Sorts of Tartar, one call'd White Tartar, that is made from White Wine; and the other Red Tartar, that is made from Red Wine.

The White Tartar is separated in much less and thinner Pieces than the Red Tartar, but is much finer, and fuller of Salt. Choose the thickest,

heaviest, and most brittle, of a greyish or asb-colour'd White, clean, crystalline, and shining within, and of a sharpish pleasant Taste.

The Red Tartar is divided into large thick Pieces, being to be chosen pure, dry, reddish and weighty; this Tartar is coarser than the White, but of the same Taste, and contains the same Principles, but less of Salt; the best Sort comes from Germany, Languedoc, and Provence. White Tartar is purified by boiling in Water, and straining it thro' Woollen Bags, then evaporating and crystallizing the Liquor, which makes what we call Crystals of Tartar; the Scum or Cream that floats on the Top during the Evaporation, is call'd Cream of Tartar; this when dried, is confounded with the Crystals, which ought to be in little clear shining Bodies, pure, white, heavy and dry, of a sharpish agreeable Taste: It is used to blanch Wax, and also to clarify Whey, a Dram being sufficient for a Pint; this White Tartar yields a great deal of essential acid Salt, and some Oil.

Red Tartar yields less Salt than White, but more Oil and Earth; they both make Vinegars when dissolv'd in Wine. The Crystals differ not from the Tartar itself, but that they contain less earthy Parts in them. All the Tartars from Wine are aperitive, and something laxative, open Obstructions, and excite to Urine, allay or abate Fevers, and are proper to dissolve tough Flegm in the Glands. The Dose of Tartar depurated is from a Dram to three Drams.

72. Of German Black.

WE have brought from Mayence, Francfort, and Strasbourg, a *Pomet*. Black in Stone and Powder, which is made from Wine Lees burnt and cast into Water, and, after having been dry'd, ground in a Mill and sifted, having burnt Ivory, Bones, or Peach-Stones added to it; and when they are all well ground and mix'd together they make what we call German Black. The best is such as is moist and of a shining black Colour, and has been truly prepar'd with burnt Ivory, which exceeds that made of Bones and Peach-Stones, and the worst Sort of Lees; for it is on the Goodness of the Lee that the Fineness of the Colour depends. There are other Blacks made at Troyes, Orleans, and Paris, which bear the Name of the Places where they are made; they are all of them of no other Use than for the Rolling-Press Printers.

[Tartar consists of the acid, oily, and earthy Parts of Wine, and the Lees of Wine are Tartar attenuated, and divided by Fermentation; Tartar may therefore be call'd the Essential Salt of Wine.

White

White Tartar contains the greatest Proportion of Acid, and *Red Tartar* most Oil and Earth.]

73. Of Figs.

FIGS are Fruit that are of several Colours; to wit, the Green, the Violet, the White, and other Colours; but of all the Sorts we sell none but the Violet and the common Fig. When Figs are ripe, the People of *Provence* gather them, and dry them upon Sieves and Hurdles. We distinguish the *Provence Figs* into three Kinds, viz. the Violet, the *Marseilles Fig* in small Frails, and the great or fat Fig. The Violet Figs ought to be large, dry and fresh; those of *Marseilles*, small, new and dry; and the great or fat Figs as like those of *Marseilles* as possible, not tough, and in small Frails of different Colours.

The Fig-Tree is so common in hot Countries, that there is not any other so frequently to be met with either about their Houses or in the Fields: It has a large Trunk, full of Branches spreading largely abroad; the Wood is very spongy, of a white Colour, the Leaves pretty much resembling those of the Vine, but are a great deal larger, and pour forth a Quantity of milky Juice. The Fruit comes from the Wing of the Leaves, being three-corner'd, and of the Shape of a Pear, in which are contain'd Flowers by the singular Contrivance of Nature, as *Valerius Cordus* first of all observ'd; these Flowers are single-leav'd, small, concave like a Spoon, ending in a small Point, and of a whitish Colour, inclining to a Purple, with a Pointal or Rudiment of a Seed in the Cavity of the Flower; the Fig is outwardly of a greenish Colour, inclining to a Violet; these being ripe and dry, stop Catarrhs or Defluxions falling upon the *Uvula* and Windpipe, and qualify the acrimonious Serum trickling down upon the Lungs. In *Portugal*, especially in the Kingdom of *Algarve*, there is a hot, fiery, inflammable Spirit drawn from Figs by Distillation, which they use instead of *Aqua Vitæ*, or Brandy.

These several Preparations of Figs are good: Take four Ounces of dry'd Figs, boil them in a sufficient Quantity of fair Water, and make a Pisan to be aromatiz'd, with some Drops of Oil of *Sassafras*, or the like; to be given in the Small Pox, Measles and Asthma: Or, take fat Figs, two Ounces, bruise and infuse them in a Pint and a Half of Spirit of Wine a whole Day, then strain out the Liquor, burn it away to the Consistence of a Syrup, to be given in a Cough, Hoarseness and Shortness of Breath: Or else, take of the Roots of Marsh-Mallows and white Lilies, of each two Ounces; of Mallows, Violets

and Pellitory Leaves, of each a Handful; Fennel-seeds, two Ounces; twenty fat Figs; Flowers of Camomile and Melilot, one Pupil; boil them in a sufficient Quantity of Water, and then pulping or forcing them thro' a Hair-Sieve, add of the Ointment of Marsh-Mallows two Ounces, of the Oil of Worms one, and make a Pultice to help Suppuration.

Ficus, *Ficus Communis*, or *Ficus Sativa*, the Fig-Tree, is of a moderate Height, whose Stalk is not strait, but the Bark is smoother than ordinary Trees, of an Ash-colour, the Wood is spongy and soft, and white within; the Leaves are large, broad, thick, cut in five Divisions or angular Parts, like those of the Vine, but much larger and harder, rougher and blacker, hanging by a Stalk that throws out a milky Liquor when broke. This Tree neither bears Flower nor Husk nor Shell that appear; but many Botanists pretend that the Flowers are enclosed in the Fruit, and that they are certain Threads like *Stamina* found in the young Figs.

This Fruit, when no bigger than a Pea, is call'd *Grossulus*; when something larger encreased, but yet not ripe, *Grossus seu Grossa*; and when entirely ripe, *Ficus*: It grows of the Size and Shape of a Pear, of a greenish Colour, whitish without, and reddish within; fleshy, succulent, viscous, and of a sweet delicious Taste: It affords a flat and almost round Seed. The Roots of the Tree are numerous, long, fair, hard to break, supply'd with Filaments of a yellow Colour. They propagate the Figs presently in temperate Climes, but the best grow in *Languedoc*, in *Provence*, and other hot Countries. There are two Species, which differ in Figure, Size, Colour, and Taste; they are all hard of Digestion, because of their viscous and tough Substance: When they are dry'd in an Oven, they are call'd dry'd Figs, *Caricæ* or *Ficus Passæ*; then they serve for Food and Physick, being easy of Digestion, since they have lost great Store of their viscous Flegm by the Heat of the Oven in drying: Figs yield a great deal of Oil and essential Salt; these soften the Acrimony of the Humours, fortify or strengthen the Breast, hasten the Birth, ease Diseases of the Kidneys or Bladder, being taken in Decoctions, or else they relieve sore Mouths and Throats in Gargles, or apply'd externally to any Part, give Ease and promote Suppuration.

Ficus Indica, vel *Ficus Indica foliis Mali Cotonæi similibus*, fructu *ficibus simili* in *Goa*, according to *C. Baubinus*. This is a Tree that grows near *Goa* in *India*; it is large, very high, and thick, extends its Branches very wide, from whence arise Fibres, like those of the *Cuscuta*, of a golden

golden Colour, which being come to the Ground, grow strong and take Root by little and little from the great Trees, which stretch themselves over all the new Filaments, that adhere likewise to the Earth, and produce Trees after the same Manner, and so on perpetually; so that these Figs multiply in such a Manner as to fill a large Country with Trees of such a large Kind and Height, that they form a spacious massy Forest, which becomes a great Relief and advantageous Shade against the Sun-Beams. The Leaves of the young Branches are like those of the Quince, green without, and white and lanuginous underneath, and serve for Food for the Elephants. The Fruit of the small Fig is made like ours, but red as Blood without and within, sweet and good to eat, but nothing like the European Fig. The Indian Fig is moistening, cooling, pectoral, and the Bark of the Tree serves for Cloathing.

[Figs are the Fruit of the *Ficus vulgaris*, Park. 1494. *Ficus communis*, C. B. Pin. 457. Externally they are an excellent Suppurative, and internally are much esteem'd as Pectorals and Detergents.]

The other Species, mention'd by Lemery, is the *Ficus Indica arcuata*, Park. 1499. It is of no Use with us, being never brought hither.]

74. Of Brignole Prunelloc, and Prunes.

BESIDES Figs, we have considerable Dealings in the Brignole Prunellocs, which are brought from Provence, especially Brignole, a little Village near St. Maximin, from whence they take their Surname. These Prunellocs are brought in long Cases, but more usually in Boxes that are cover'd with white Paper, artificially cut; they ought to be dry, fair and fleshy; when the Paper that covers them is dry, it is a certain Sign that they are good.

We sell also Abundance of Prunes, as the large and the small, St. Catharine Prunes, and the little black Damask, and St. Julian Prune, which we have from St. Maur's, Chinon, and other Parts of Touraine. Besides, we sell a great Quantity of Prunes, which are longish and come from Bourdeaux, and several others from Monturel, Perdrigon, Imperial, and in general all Sorts of Fruits, dry and liquid, which we have brought from other Parts, but especially Tours, as dry'd Pears, Apples and Cherries, with Variety of others that are kept for eating in Lent. The Choice of all these Fruits is to have them new in Boxes, or little Chests, and as fresh and good at the Bottom as at the Top of the Parcel.

Prunum or *Prune*, is a Fruit of several Kinds, according to the different Places where it grows, both as to Shape, Size, Colour and Taste; but they are all so well known, I shall only mention the black Damask *Prune*, which we use in Physick, call'd in Latin, *Pruna parva dulcis atro-cerulea*, the little, blueish, black sweet *Prune*; they are of a moderate Size, round, fleshy, cover'd with a black Skin; their Substance red, succulent, not sticking to the Stone, of a good Smell, and sweet pleasant Taste; the Stone is small and longish, enclosing a little Kernel, almost round or oval, of an agreeable Taste, inclining to bitter. These Prunes grow upon a Kind of Plum-Tree, of a moderate Height and Size, call'd *Prunus sativa fructu parvo dulci atro-ceruleo*; the Leaves are longish, pretty broad, slightly indented on the Sides; the Flower is composed of five Leaves, disposed like a Rose, of a white Colour; this Tree is cultivated in the Gardens.

The Damask *Prunes* ripen towards Autumn, and are to be chosen pretty large, well fed, ripe, new gather'd, of a good Taste and Smell; they yield a great deal of Flegm, Oil and essential Salt; they dry great Quantities of these Prunes in their Ovens about Touraine, and near Bourdeaux, and disperse them all over France and other Parts in the Winter. That which is call'd the *Prunelle* ought to be taken fresh, fleshy, dry, soft and of a good Taste. Fresh or dry'd Damask Prunes are moistening, emollient, laxative, being taken in Infusion, Decoction, or eaten in Substance. They find sometimes upon some Sorts of Prunes, a white, shining, transparent Gum, like Gum-Arabick, which the Merchants frequently mix among that Drug, as it is like it in Colour and Virtues. It is given in Powder or Mucilage.

[The Prunellocs of Brignole are the dry'd Fruit of the *Prunus Reignoniensis fructu suavissimo*, Tour. Inst. 632. *Prunus Brignolensis*, Rup. Flor. Jen. 106.]

The Damask *Prune* is the Fruit of the *Prunus fructu magna dulci atro-ceruleo*, Tourn. Inst. 622. Boerh. Ind. alt. 2. 241.

And the common *Prune* is the Fruit of the *Prunus fructu parvo dulci atro-ceruleo*, Tourn. Inst. 622. *Prunus domestica*, Ger. 1311.

To these ought to be added the *Prunellus* of the Shops, the common Sloe-Tree. *Prunus sylvestris* of Gerard, Parkinson, &c. of the Pulp of the Fruit of which we make the Conserve of Sloes, and the inspissated Juice of which is the *Acacia Germanica*, which at present is generally sold for the true *Acacia*.]

76.

Mistletoe.

Moss.

Bazduendae

Polipody of Oak.

78

Alppo Galls.



light Galls.



Bourdeaux Galls

75. Of the large Chestnuts, call'd by the French, Marons.

Pomet. *THE* Fruit which we trade in is call'd the *Lingus Chestnut*; but as that is very common, I shall not insist upon it. I shall only inform you, that the *Marons* are those which grow about *Lyon* and the *Marais*, which are good, should be kept, fresh, till they are need'd. As to the small *Chestnuts*, they should be near to the large, only be cleaner and rounder. Their Use is to eat as well as the other *Chestnuts*; as all the World knows: Besides, they are of some Use in Physick, because they are astringent.

Castanea, or the *Chestnut-Tree*, is of *Lemery*. two Kinds, one Domestick and the other Wild. The Domestick is call'd *Castanea Sativa* by *Cass. Bauhin*: This is a great spreading Tree, at this Day cultivated by all People as well for its Beauty as its Profit, and so well known to every Body, we may be excus'd a Description. The Wild *Chestnut* is call'd *Castanea sylvestris*, quæ peculiariter *Castanea*, or *Castanea minor*; the lesser *Chestnut*: This differs no otherwise from the former, but as it grows wild instead of being improv'd. It is much less in Size, and the Fruit smaller. It grows plentifully in the *Limousin*, in *Languedoc*, and supports a great many Persons in the World, and especially the Poor. The huge Sort of *Chestnuts* that grow in the hot Countries are call'd *Marone*, or *Marons*, most of which are brought from the *Vivarez* and the *Limousin*. Chuse such as are largest, the most fleshy, and of the best Nutriment; they all abound with a good deal of Oil and a little Salt. The *Chestnuts*, especially the small, are astringent, and the Rind is used to stop the *Fluxus Albus* in Women.

[*Chestnuts* are the Fruit of the *Castanea Sativa*, *Gei Park*, &c.

The Wild *Chestnut*, mention'd by *Lemery*, is the *Castanea sylvestris*, *Jonst. Dendr.* 118. *Castanea sylvestris quæ peculiariter Castanea*, *C. B.* 1m 419.

The first is cultivated in *Walls*, &c. the other is wild in some of our Woods.

76. Of the Oak.

Pomet. *THE* *Oak* is a Tree known to all the World, as well because of its Durableness, as for the different Uses made of it. This Tree is the Emblem of Virtue, Strength, Firmness and Duration, and was therefore by the Antients dedicated to *Jupiter*. Some

pretend that this Tree is a mortal Enemy to the Olive and the Walnut-Tree; so that neither of them can live near it.

The first Thing, and the most considerable we have from the *Oak*, is the *Mistletoe*, which is an Excrescence that is found growing to the said Tree: This Production appears extraordinary, in that the *Oaks* do not produce this *Mistletoe* in all Places: There are some that produce it in this Respect like those that are not, as *France*, *Rome* and *Lorraine*, especially near a little Village call'd *Reims*, about the Middle of the *Seine*. Its Appearance resembles the Branches of a Tree, but is of a so heavy Substance, that a *Greenhorn* grows outwardly, and of a yellowish white within.

The Branches are hard and compact, and bear several little Sprigs which intermingle with each other, and from whence arise a great many longish, small leaves, that are semi-circular, of a pale green; the Berries are white, resembling our little white Currans, and these Berries contain a viscid Humour which the Antients used to make Glue with. The *Mistletoe* continues always green during the Time it remains upon the Tree, Chuse the largest, heaviest, and best tied: You may know if it be true by the deep Colour within, but the surest Way is to see that some Part of the *Oak* hangs to it. They attribute a great many Virtues to the *Mistletoe* of the *Oak*, and the Antients rever'd it, and held it sacred as well as the Tree itself. *Julius Caesar* and *Pliny* say, that the *Druids* assembled themselves under these Trees to perform their Devotion; these *Druids* inhabited the Countries we now call *l'Isle de France*, near *Chartres*, whence it is evident that there have been *Oaks* which bore *Mistletoe* in *France*.

This *Mistletoe*, taken inwardly, is esteem'd an excellent Remedy against the Palsy, Apoplexy, Falling Sickness, and Worms: It is also an Ingredient in many Compositions for external Use, as Ointments, Plaisters, &c. as a Resolvent. The Berries are acid and bitter, and their Juice is good to ripen Abscesses, and hasten their Suppuration.

Mistletoe is also the Basis of the *Pulex ad Gutta*.

It is found growing upon many other Trees as well as the *Oak*; but its Virtues are supposed not to be the same when it is taken from any other Tree.

All the Parts of the *Oak* contain a great deal of Oil and essential Salt; the Bark and Leaves are astringent and resolvent, good in the Gout, Sciatica and Rheumatisms, used in Fomentations, and taken inwardly in Decoctions to stop Diarrheas and Hemorrhages.

The second Thing we have from the *Oak* is a little Plant we call Polypody of the *Oak*, which is like what we have from Walls: This Sort of Plant grows from Places where the Branches of the *Oak* are forked, by Means of some small Earth that lights there, and the Water which drops upon it: It grows likewise upon the Stump of the said Tree. We rarely use this Polypody, because it is not so proper, since that is much better which grows upon old Walls, which is the Sort that is brought to us about *Paris*. Chuse the Root such as is new, plump, dry, brittle, of a reddish, tawny Colour on the Outside, and greenish within; sweet and Sugar-like, inclining something to a Liquorice Taste.

Quercus vulgaris, the common *Oak*, *Lemery*. is a thick, strait, durable Tree, spreading its Branches wide; the Trunk is cover'd with a thick rugged Bark; the Leaves are large, longish, and broad, deep slash'd or indented, hanging upon short Stalks; the Flowers are in long Shells or Husks, composed of little Threads hanging upon one another by a fine Fibre or String; these Husks leave no Fruit behind them, the Fruit growing in different Parts, which are the Acorns; that are about the Size of the Olive, of an oval or cylindrical Figure, contain'd in a hard grey Cup, call'd in *Latin*, *Cupula seu Calix*; this Acorn is cover'd with a hard Rind, that is smooth and shining; green at first, but yellowish as it grows riper; within this Rind we meet with a Sort of Kernel, or hard fleshy Seed, composed of two Lobes. The Acorns hang upon the Tree by long or short slender Stalks, and their Taste is astrigent.

All the Parts of the *Oak* contain in them a good deal of Oil and essential Salt: The Acorn, call'd in *Latin*, *Glaus Quercina*, is likewise employ'd in Medicine. Chuse such as are large, and plump, separated from the Rind, and dry'd gently; but take care of Worms, to which they are subject, let them be reduc'd to Powder before using; they are astrigent, and proper to appease Wind Cholicks, and the Fluxes of Women newly deliver'd.

Polypodium, or common Polypody, hath a Root taking a very slight and superficial Hold of the Earth; it is pithy and brittle, about the third Part of an Inch thick; within, it is of a pale green Colour, but outwardly a little reddish, and cover'd over with fine thin Scales when it is fresh and green; but being dry, it becomes of a more red Colour: It is knotty, or full of round Knobs, and adorn'd with several small Filaments, like Hairs: Its Pith is sweetish, with somewhat of a sharp, austere, or styptick Taste. The Leaves spring out of the Knots or hollow Knobs of the Roots; they are

single, about nine Inches in Length, and parted into several Jags or Scollops, cut close into the Ribs; they are sharp-pointed, of a light green Colour; it bears no Flowers, but there arise several small Knobs, like Blisters, upon the lower or under Part of the uppermost Jags of the Leaves, rank'd in a double Order; they are round, and about the sixth Part of an Inch thick, consisting of a fine Dust, that is first a little yellowish, and turns of a bright Golden Colour: Every Grain of this Dust is a Sort of small Seed-Vessel, being of a round Figure, and membranous, which, when ripe, breaks into two equal Parts, and pours forth several Seeds, so small that they can scarcely be discern'd by the naked Eye.

Polypody grows upon Rocks, old Walls, and antient decay'd Trees; but that which grows upon old *Oaks* is reckon'd the best; upon which Account Polypody of the *Oak* is commonly prescrib'd, and is rank'd among the purging Medicines: Yet *Dodonæus* denies its cathartick Quality; neither ought we to dissemble the Matter, for the Decoction of it scarcely moves the Belly, but the Powder of it does something, being given from one Dram to two Drams.

This Root contains a great deal of Oil, and no small Quantity of an acid Flegm; but this is, as it were, suffocated by the Oil, which is the Cause that it produces no Alteration of Colour on blue Paper, when it is dipp'd in the Infusion of it. There is likewise a large Quantity of Earth extract'd from Polypody by a chymical Resolution. 'Tis from this Earth that its styptick and brackish Taste proceeds. The Roots are very properly administer'd in all Distempers proceeding from a saltish Disposition of the Blood; such as the Scurvy, Rickets, and Hypochondriack Passions; they also help to abate an inveterate Cough, when it is attended with a saltish Spit-tle. They are prescribed in Potions and Apozems.

Take of Polypody of the *Oak*, two Ounces; Salt of Prunella, one Dram; infuse them in a Quart of warm Water; strain it: To be taken by Cupfuls or Spoonfuls. as an Apozem. Or, take Polypody of the *Oak*, one Ounce and a half; Elecampane-Roots, three Ounces; infuse them all Night in a Quart of warm Water; in the strain'd Liquor add two Ounces of *Calabrian* Manna; mix and make a Pifan to be drank. Take of the Decoction of Polypody Roots, six Ounces, in which infuse two Drams of Sena-Leaves; in the strain'd Liquor dissolve the Electuary of *Diacarthamum*, three Drams; mix and make a purging Potion. Polypody Roots are used in the Catholick Electuary, the Lenitive Electuary,

Electuary, the Confection of *Hamech*, the Panchymagog Extract of *Hartman*; *Quercetan's* Pills of Taitar, and in the Hiera of Coloquintida.

[The *Oak*, whose Bark, &c. are used in Medicine, is the *Quercus vulgaris*, Ger. 1156. *Quercus latifolia*, Park. 1386. The Mistletoe is the *Viscus Quercus et aliarum arborum*, J. B. 1. 89. *Viscum vulgare*, Park. 1392.

And the Polypody is the *Polypodium vulgare*, C. B. Park. &c.

It is to be observ'd, that both these are much more frequently found on other Trees, than on the *Oak*.

The other Species of the *Oak*, mention'd in the Catalogues of Official Trees, are,

1. The *Phagus*, *sive Esculus*, Park. 1387. J. B. 1. 2. 74. the Esculent or Sweet Oak, the Acorn of which is eatable, not being so bitter as those of the rest.

2. The *Cerrus*, Aldrov. Dendr. 253. *Cerris majore glande*, Ger. 1162. *Quercus Calyce echinata, glande majore*, C. B. Pin. 420. the Bitter Oak. And,

3. The *Robur tertia Clusii*, J. B. 1. 2. 76. *Robur sive Galla major altera*, Ger. Em. 1348. the *Gall Oak*.

The common *Oak* grows naturally in many Kingdoms; the *Esculus* is found in Greece and Dalmatia, the *Cerrus* in Italy, and the last in Smyrna and other Places.]

77. Of the Oil of Acorns.

BESIDES the Polypody, the Oak produces *Acorns*, which are its proper

Fruit, and People pretend to make and sell the Oil of them; but as I never could succeed in the making it, I shall only observe, that all the Oil of *Acorns* that the People of *Provence* send us, is nothing but the Ben or Nut Oil, in which the *Acorn* has been infused. The great Scarcity of the true Oil, is the Reason that the World attributes such great Virtues to it, as they do to the Oil of *Talck*. There may be a true Oil of *Acorns* drawn by the Retort, but it will be black, and of an ill Smell.

The Oak produces, beside the *Acorn*, the Mistletoe, and Polypody, a Moss which is what we call *Ufnea*, it enters the Composition of the Cyprus Powders; those of *Frachipani* and *Le Mat-shale*, or the Farriers Powder, which we have brought from *Mantpellier*. The true Description of making these Powders is unknown to me, which obliges me to refer the Reader to a Description made by the *Sieur Barbe* in a little Treatise of his printed at *Lions*.

78. Of Galls.

GALLS are produc'd by a Kind of Oak that grows plentifully in the *Pomet. Levant*, especially about *Aleppo* and *Tripoli*, which are those we call *Aleppo* and *Tripoli Galls*: Besides, they are brought from *Smyrna*. There are also some grown in *France*, in *Provence*, and in *Gascoigny*, but much inferior to those of the *Levant*, in that they are usually reddish, light, and altogether smooth; and those of the *Levant* are prickly, from whence they are denominated the *Prickly Galls*; they are also more heavy, and are either blackish, or greenish, or whitish. The Variety of these Fruit occasions that they are put to different Uses; those of *Aleppo* and *Tripoli* are for dying black, and making Ink; the White for dying or staining Linnen, and the Light *French Galls*, for dying Silk: All the Sorts are of some Use in Physick, especially the more astringent and styptick they are; being good to draw together and fasten loose Parts, to dry up Rheums and other Fluxes, especially such as fall upon the Gums, Almonds of the Throat, and other Parts of the Mouth; used in a Decoction, in Water or Wine, they cure Diarrhoeas, Dysenteries, and are good against all Weaknesses of the Bowels: A Fumigation in Claret is good for Women to sit upon, that are troubled with a Flux of Reds or Whites, or falling down of the Womb; as also of the Fundament: The Ashes quenched in Wine or Vinegar, being apply'd, staunch Blood; and the Powder of the crude *Galls* may be given inwardly from ten Grains to a Scruple, to all the Purposes aforesaid.

There grows upon a Species of Oak in *Turky* a little reddish Fruit, of the Bigness of the Hazel-Nut, call'd by the *Turks*, *Bazgenidge*, whose Figure is represented by the Impression of the Oak. The *Levantine*s, especially those of *Aleppo*, take a hundred Drams of Cochineal, which they call *Cormeti*; fifty Drams of *Bazgenidge*, and fifty Drams of Tartar; and after powdering them all, they make a very fine Scarlet. This Fruit is very scarce in *France*, for which Reason it is not used there, tho' some of it is frequently found among the *Galls* and thrown away, because it is not known.

Galla, or the *Gall-Nut*, is an Excrescence which grows upon an Oak in *Lanury. the Levant*, whose Origin proceeds from this, that certain Insects bite the tenderest Part of the Tree; so that an Humour flows out into a Shell or Bladder, which fills and hardens as it grows on. There are several Sorts of *Galls*, that differ according to their Size, Shape, or Colour,

our, and by the Surface of them being smooth or rugged; they are usually round, and as big as the Common Nut, some as the Filbert, rough or prickly, white, green, or black; the best comes from *Aleppo* and *Tripoli*. Choose the best sed and weightiest.

There are also *Galls* grow in *Gascigny*, and in *Provence*, which differ from those of the *Levant*, being smooth, light, reddish, and affording a less Tincture. They are astringent, and enter several medicinal Compositions; as Plaisters, Ointments, Injections, Fomentations, &c.

[The Species of Oak from which we have the greatest Quantity of *Galls*, is the last of those mention'd at the End of the foregoing Chapter; the Insect whose Puncture produces them, is a small black Ichneumon Fly, which leaves its Egg within them, which afterwards hatches into a Maggot, and from that, after a Week's Rest in its Chrysalis State, becomes a Fly, like that whose Egg produced it.

79. Of Agarick.

Pomet. **A**garick is an Excrecence that is found upon the Trunks and large

Branches of several Trees, but chiefly upon the Larch-Tree, call'd by the *Latins*, *Larix*, and upon several Sorts of Oaks; the best is white, light, tender, brittle, and of a bitter Taste, pungent, and a little styptick; and this is the *Agarick* the Antients used to call the Female: As for that which is term'd the Male, it is usually heavy, yellowish, and woody, and ought to be entirely rejected from physical Uses. The best *Agarick* is that from the *Levant*, it being abundantly better than what comes from *Savoy* or *Dauphiny*. We have likewise some from *Holland*, that is rasp'd and whiten'd on the Outside with Chalk, which ought also entirely to be rejected; in short, none is fit for Use but that of the Larch-Tree and what we have from the *Levant*: The Dyers use this to dye Black with.

The *Agarick* of the Oak is generally reddish and heavy, and of very little Value; for which Reason I shall say nothing more about it.

Agarick was a Medicine so familiar to the Antients, that they made use of it not only for purging Flegm, but likewise in all Distempers proceeding from gross Humours and Obstructions; such as the Epilepsy, Vertigo, or Giddiness of the Head, Madnefs, Melancholy, Asthma, and Distempers incident to the Stomach, and the rest of that Kind; yet they complain'd that it weaken'd the Bowels, and purg'd too churlishly; upon which Account *Galen* steep'd the Powder of it with Ginger, and gave it, to a Dram, in Oxy-

mel, or Honey of Squills. It is prescrib'd in Powder, tho' rarely, from a Dram to two; but in Decoction, or Infusion, from two Drams to half an Ounce.

By a chymical Dissolution it passeth almost all away into Oil: It yields no volatile Salt, but abounds with a Sort of scaly Earth, and an acid Flegm; the Infusion of *Agarick* makes the blue Paper of a purple Colour. It ought to be corrected with Cloves, Cinnamon, Mace, Mint, Wormwood, and others of this Kind. Its Slowness in working may be help'd or promoted with Scammony and Calomel; or it may be wet in some purging Decoction made of Asarabacca, Sena, and other Purgatives, and then dry'd again, and form'd into Lozenges, adding Balm of *Peru*, or Oil of Cinnamon to correct it.

These Lozenges are commonly kept prepar'd in the Shops: But we must not forget to take notice, that *Lusitanus* admonishes us to make use of the Troches of *Agarick*, or *Lozenges*, while they are fresh, and new made, lest their Virtue be weaken'd by long keeping. Besides the Troches, there is an Extract and Rosin prepar'd from *Agarick*: It is likewise used in the Confection of *Hamech*, *Hiera Picra*, the Blessed Extract, and Pills of *Euphorbium*.

[*Agarick* is the *Agaricus sive Fungus Laciniis*, C. B. Pin. 375. *Agaricum*, J. B. 1. 268. It is cover'd with a yellow Bark, and is white within; it tastes sweet at first, but bitter after a Moment's holding in the Mouth; this is

The Female, which is used in Medicine.

The Male is yellow, hard, and woody, and is used in Dying.]

80. Of the Confection of Hamech.

Agarick being one of the Ingredients of this Composition, which we *Pomet.* have brought from *Montpellier*, together with Confect of Hyacinth and Alkermes, Treacle and Mithridate, I thought it not improper to mention it in this Place: Tho' it is almost out of Practice in some Countries, it is a good Medicine if faithfully prepar'd; however, I shall only give you the Receipt, and leave you to consult the Method of preparing it in the Dispensatories of Mr. *Charas* and others.

Take Polypody of the Oak, Raisins stoned, Damask Prunes, of each four Ounces; Citrine, Chebulick, and *Indian* Myrobalans, Violet-Seeds, Coloquintida, White *Agarick*, Sena, of each two Ounces; Wormwood, Thyme, of each one Ounce; Red Rosins, Aniseed, and Fennel, of each six Drams; Juice of Fumitory depurated, a Quart; Sugar and pure Honey, of each three

three Pounds ; Cassia and Tamarinds pulp'd, and pure Manna, of each four Ounces ; Rhubarb, White Agarick, *Alexandrian* Sena, of each six Ounces ; the five Myrobalans and Epythymum, of each six Ounces ; Cinnamon and Ginger, of each two Drams : Mix all together according to Art, and make a soft Electuary, working it well and preparing it truly, and it will keep a long Time. This Confect, thus artfully made, is of a shining black, and a good Consistence. This, with the other before-mention'd, we reckon the five great Compositions of the Shops.

We sell likewise dry'd Morells and Truffles, and black Sow-bread, which are brought from *Provence* and *Languedoc*, with the Bulbs of *Tuberoſe*, *Ranunculus's*, and *Junquils*, which come from *Italy*, *Provence*, and some from *Constantinople*, together with *Jews-Ears*, which is a fungous Excreſcence found on the Stumps of *Elder-Trees*, before their Leaves appear, something in the Form of an Ear, from whence it had its Name, &c. And they bring us from *St. Fleur* in *Auvergne* a certain grey Earth, in little Shells, which is what we call *Perelle*, and the People of that Country tear it from the Rocks : This Earth is lodg'd there by the Winds, which carry the Earth

upon the Rock, and by the Rain and the Sun is calcin'd after being wet. The Use of it is to make *Orseille*, of which mention was made in the Chapter of *Turnſol*. We sell, besides, a certain Herb which we call *Preſſe*, and the Botanists *Equiſetum*, or Horſe-tail, which the Cabinet-makers, and Artificers in Wood, use to polish their Works withal.

[The Confection of *Hamech* is now entirely out of use.

The *Jews-Ears* are in great Esteem among the common People, as a Remedy for Sore Throats ; but I have observ'd that they are never seen in the Shops : What is constantly sold under that Name, is the *Fungus membranaceus expansus*, R. Syn. Ed. tert. Pag. 18. which our Druggists employ People to gather from the old Water-Pipes about *Iſlington*, and elsewhere.

The true *Jews-Ear* is the *Peziza Auriculum referens*, R. Syn. 195. *Fungus membranaceus Auriculam referens sive Sambucinus*, C. B. Pin. 372. of which I have some fair Specimens, which I found about three Years since on the *Elders* near the *Neat-Houses* in the Way to *Chelsea*, and which are entirely different from what is sold under that Name.]

The End of the Book of FRUITS.

BOOK the Eighth

OF G U M S.

P R E F A C E.

WE distinguish Gums into two Sorts; namely, such as are aqueous, and such as are resinous. We understand by the aqueous Gums those that will dissolve in Water, Wine, or other the like Liquids; as Manna, Gum Gutta, & Gamboge; and by the resinous, those that will not dissolve but in Oil, as Gum Elemi, Catamahaca, and the like, as you will find by the subsequent Discourse. There are some who will add to these two Sorts a third, which they call the *laxative*, and which they pretend will not readily dissolve either in Water or Oil, as Myrrh and Benjamin. If Seeds, Roots, Woods, Barks, Flowers, Leaves, and Fruits, are so difficult to distinguish one from the other, Gums are not the less so; and as our Knowledge of them is difficult, there are Substitutes of one Kind or other sold at Times, either thro' Ignorance or Ignorance, for almost every Gum in Use.

Of the Manna which was gathered by the Israelites in the Desert.

WHEN the Israelites had passed the Red Sea in a miraculous Manner, and were deliver'd from their Enemies, the Pharaoh pursued them into the Desert, and they murmur'd against Moses: But that faithful Minister of God made his Supplication to Heaven, and God stay'd not to give them Food; for there fell a great Quantity of Quails in their Camp; and the next Morning it rained Manna upon the Earth, which was continued for forty Years, during the Time the Hebrews remained in the Desert. The People were presently surpris'd when they beheld the Earth all cover'd with a Kind of Grain they were Strangers to: and the Scripture informs us, that not knowing what it was, they cried out with Achanizah, *Man hu?* Quod est hoc? What is this? Moses told them it was the Bread of Heaven, and appointed them to gather it every Morning, before the Sun-rise, to gather this divine Food, and when the Day was ad-

vanc'd, it was no Time to gather the Manna, which melted away after the Rising of the Sun.

The Jewish, as well as the Christian Interpreters, do not agree about a great many Things relating to this Manna: They are divided about the Etymology of the Word Manna; some will have it that it comes from the Hebrew, *Man hu*, which the Jews pronounce'd when they saw the Earth cover'd with little white Grain or Seeds, which fell during the Night; nevertheless several others, of which Number Buxtorf is one, say, that the Word Manna signifies Food prepar'd, as if he should say, the Food which God had prepar'd for his People. Neither are they at all better agreed about the Nature of this Manna; several maintain that it was the same with the purging Manna now used in Physick; that is to say, a Liquor which falls in the Nature of Dew, and which is congeal'd into little Grains, like those of Cornander. *Valerius*, Physician to the Emperor Charles the Fifth, is of this Opinion. *Cornelius à Lapide*, a very learned Jesuit, says in his Commentary upon *Exodus*, that he had seen in Poland little Seeds like Millet, something long and reddish, which fell, during the serene Nights, in June and July, and that they were eaten when boil'd,



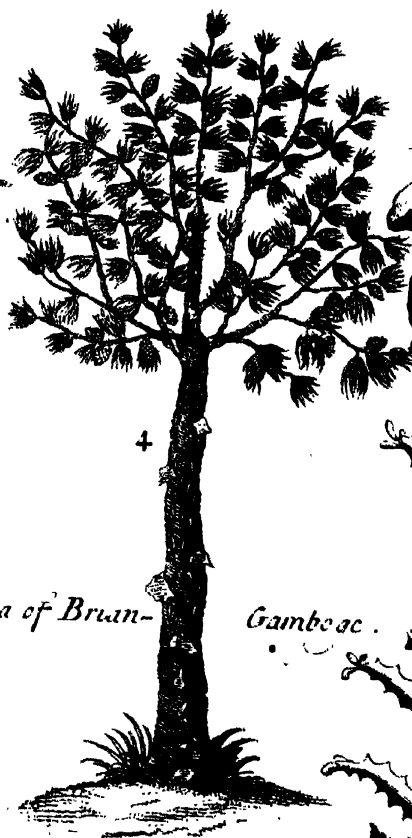
2

Calabrian Manna.



3

*Liquid
Manna.*



4

*Manna of Brian-
son.*



5

Gamboge.

boiled, having the same Taste as the Panick. And I have been confirm'd in this by a Friend of mine, who was a long Time in *Poland*, especially on the Side of *Silesia*, where this Dew falls plentifully. And I have also seen on the Heights of *Dauphiny*, at the Foot of the Mountain of *Geneva*, about Four o'Clock in the Morning, a large Quantity of this *Manna*, which I have taken at first Sight for Hail, but after having tasted it, I found, by its sweet sugary Taste, that it was a Dew like that spoke of in the Holy Scriptures; for as soon as the Sun was up, it dissolv'd.

Those who hold that the *Manna* with which God fed the *Jews* in the Desert, was not the same with that used in Physick, say, that that which purges must weaken and cannot nourish; but *Vossius* answers this Difficulty, and says, that this *Manna* differ'd not at all in its Nature, but as to Accidents, from that used in Physick; and this Difference arose from the Preparation which the Angels made in sweetning and cleansing this Dew from its Aqueous Parts that the common *Manna* is loaded with, in order to make it fit for Bread, &c. as that which falls in *Poland* in the Months of *June* and *July* is. Beside which, the constant Use of a Medicine will hinder it from having its common Effect. We see Men daily who make their Food out of strong Poisons by a continued Custom and Habit; and Wine shall be highly serviceable to Persons when sick, who do not drink it at other Times; shall be hurtful to Persons in Illness who make a constant Use of it when well. *Valesius* does not doubt in the least but that the *Manna* in the Desert did at first purge the *Hebrews*, who were replete with gross Humours, which they collected by the Use of Garlick, Leeks and Onions, of which they fed during their Abode in *Egypt*; and that after they had been duly purged, the *Manna* became nutritive, especially after having been prepar'd or purified by the Angels; for it is expressly said in *Psalms* lxxviii. ver. 23, 24, and 25. *God commanded the Clouds above, and opened the Doors of Heaven; he rained down Manna also upon them for to eat, and gave them Food from Heaven: So Man did eat Angels Food.* And this Explication appears very agreeable to the *Hebrew* Word *Manna*, which signifies Nourishment, or Food prepar'd; as may be infer'd from the 31st Verse of the 11th Chapter of *Exodus*, where it is said, *And the Taste of Manna was like Wafers made with Honey.*

2. Of Manna.

Pomet. **T**HAT which we call and sell now by the Name of *Manna*, is a white crystalline Liquor that flows with-

out Incision, and with Incision from both the wild and domestick *Ashes*, which the *Italians* call *Fraxini* and *Orni*, that grow plentifully in *Calabria* and *Sicily*, but chiefly at *Gallipoli*, about Mount Saint *Angelo*, and *Tolfe*, from whence almost all the *Manna* we now sell is brought.

We sell several Kinds by the Name of *Calabrian Manna*. The first and best Sort is the *Manna* of Mount St. *Angelo*, but that is fatter than the other Kinds, and therefore very little demanded by People who do not understand it: The second is the *Sicilian Manna*, which is usually white, dry, and teary. The third Sort of *Manna* is that of *Tolfe*; this is the worst of the three, and is that which is improperly call'd *Briançon Manna*, which is another Kind, as will be seen hereafter; this is dry, white, and very apt to be full of Dirt.

The *Arabians* look'd upon *Manna* to be a Sort of airy Honey, or a Dew that falls from the Heavens: And this was a common receiv'd Opinion for many Ages; but *Angelus Sala*, and *Bartholomæus ab Urbe veteri*, two *Franciscan* Friars, who, in 1545, publish'd Commentaries upon *Mosus*, were the first that I know of, that in their Writings affirm'd *Manna* to be truly the concentered Juice of the *Ash-Tree*, as well the common as of the wild, generally call'd *Quickbeam*. *Donatus Antonius ab alto mari*, a Physician and Philosopher of *Naples*, who flourish'd about the Year 1685, has also confirm'd this Opinion by several Observations.

For first, having cover'd *Ash-Trees* for several Days and Nights together all over close with Sheets, so that no Dew cou'd possibly come at them; yet he has found *Manna* upon these Trees so cover'd, under the Sheets, when at the same Time not the least Sign or Impression of any Dew or Honey was to be seen upon the upper Part of the Sheets. 2dly, All those who make it their Business to gather *Manna*, freely own and confess that it drops out again of the same Places of the Trees, from whence it was before taken, and by Degrees coagulates with the Heat of the Sun. 3dly, In the Trunks of the *Ash-Trees*, little Bladders, or as it were Blisters, are often observ'd, or rise near the Bark, which are fill'd with a Liquor of a white Colour, and sweet Taste, which afterwards thickening, is turn'd into a very good Sort of *Manna*. 4thly, The very same Liquor flows out of the Bark of the *Ash* when it is wounded. And it is very observable, that *Grasshoppers* and other small Insects very often bore through the Bark of this Tree, that they may suck this sweet Tear; and when they have left it, the *Manna* sweats out of the small Wounds that they have made. 5thly, Wild *Ashes*.

being cut down by Coopers to make Hoops for Wine Vessels, it often happens that no small Quantity of *Manna* flows out of their Stocks or Boughs, being cloven or split lengthways, and exposed to the Heat of the Sun. *Gibby*, Such as are employed in the making of Charcoal, confidently assure us, that they have often observ'd *Manna* sweat out of the Ash-Wood, after it has been kindled and thrown in the Fire.

The same Author further takes Notice, that the same Trees yield *Manna* every Year, but not all of them indifferently; upon which Account there are a great many that make it their Business, for the Sake of Gain, to bring up these Trees: Yet there are in these Places Trees of the same Kind, that afford no *Manna*. Moreover the same Author tells us, that the *Manna* runs chiefly out of that Part where the Foot-stalks of the Leaves are inserted into the Branches; for in these Parts the Vessels being thinner and finer, are the more easily divided; wherefore he does with very good Reason observe, that *Manna* never drops out of the Leaves of this Tree, unless it is at Noon, or about the hottest Time of the Day; because there is a large Degree of Heat requir'd for the fetching of this Juice out of its proper Vessels, and conveying or translating it unto the distant Leaves. In the Kingdom of *Naples* and *Sicily*, *Manna* naturally flows and drops out of the Leaves of the aforesaid Trees in the Form of a clear Liquor, and afterwards thickens and becomes a little hard; but especially in the Month of *June*, when the Weather is very hot and dry; next Day, with a Knife, they scrape and pick it off the Leaves, lest it shou'd be dissolv'd and wash'd away by the falling of Rains, or the Moistness and Dampness of Air; then they carefully put it up in Vessels, well glazed; and after that they expose it to the Heat of the Sun, 'till it will not stick nor cleave any more to the Fingers; otherwise it wou'd melt and lose its Whiteness.

Manna flows spontaneously from the Middle of *June* to the End of *July*, unless Rains happen to fall; after the Month of *July*, the Country People or Peasants make an Incision into the Bark of the Ash-Tree, even to the Wood, from whence the Biquor of *Manna* continues to flow and drop, from Noon-Time to Six o'Clock in the Evening incessantly, which afterwards runs together into thick Lumps or Clots, but of a darkish Colour. This spontaneous *Manna*, by the *Italians* is call'd *Manna Di fronda*, upon Account that it drops from the Leaves of the Ash-Tree, like Sweat in the Dog Days or Heat of Summer. But that Sort of concreted *Manna*, that proceeds from the Bark of those Trees being wounded, is call'd by the *Italians* *Sparfatella* and *Stoifata*, or *Manna*

Dicorpa. This Opinion of *Altomarus* has been defended by *Gropius*, *Labellius Casalpini*, *Custanus*, *Cornelius Conventinus*, *Boccone*, and others; who have given more Credit to their Eyes than to Authority.

Manna is approv'd of when it is fat and a little clear, of a sweet Taste like Sugar, and biting to the Tongue. Chuse that which is fresh and light, from a white Colour inclining to be a little brown, and when the Clots or Lumps being broken, look as if they were sprinkled with Syrup. That is to be rejected which is dry, and as it were spongy, without any Manner of biting Taste; and that is good for nothing that is nauseous, impure and adulterated.

The *Calabrian Manna* is most esteem'd; but besides that, there is a Sort of it sold in the Shops, call'd the *Larch*, or *Briançon Manna*, because it flows from *Larch Trees* growing nigh *Briançon* in *Dauphiny*, of this we shall speak in the next Chapter, but it is but little used, because it is much inferior to the *Neapolitan Manna*. *Calabrian Manna* purges moderately in the Dose, from one Ounce to two or three; it allays the Acrimony of Humours, and is very useful in bilious Distempers, and others attended with Inflammations, such as *Hæmorrhoides*, *Pleurisy*, and *Peripneumony*. It is seldom prescrib'd dry, or by itself, but very often in Potions, &c. As for Example: Take an Ounce or two of this *Manna* and dissolve it in five or six Ounces of warm Water, Broth, Whey, or the like; to which add an Ounce of Syrup of Succory with Rhubarb, or Roses purgative, or Violets, for a Dose. When Patients are afflicted with vomiting, or a Disposition to it, take of *Calabrian Manna* two or three Ounces, *Tartar Emetick* eight or ten Grains, dissolve them in a Quart of Whey, and let the Patient drink this by Cupfulls, now and then taking a little warm Broth betwixt.

Monsieur *Charas* and others likewise agree, that the true *Manna* is not found upon all Plants, Trees, Rocks, and Earths promiscuously, as some believe, but only upon the ordinary *Fraxinus*, or Ash-Tree, and upon the *Ornus*, or wild Ash. That it is gather'd from the Ash or wild Ash is evident; for that upon some large Tears, the very Print of the Leaf upon which they grow is to be seen, and oftentimes Ash-Tree Leaves are found mix'd with it.

That which comes from the Body of the Ash, and issues voluntarily and freely, as also from the biggest Branches of the Tree, is the purest and fairest, and comes forth in a chrySTALLINE Liquor, beginning to distil in *June*, forming itself into Tears bigger or lesser, as the Part of the Tree is more or less full of it; this is gather'd the next

Day

Day after it is distill'd forth, for in that Space of Time it hardens by little and little, and becomes white; this, if it shou'd meet with Rain and Wet, will melt and come to nothing. They take the Bark from it with a thin pointed Knife, putting it into glazed Earthen Pots or Pans, then spreading it upon white Paper, they expose it to the Sun, 'till it ceases to stick to the Fingers, lest it shou'd dissolve by Addition of any superfluous Moisture, and lose its Whiteness: This gathering continues about six Weeks.

The next Kind of *Manna* is that which is forced, which is drawn forth when the former *Manna* ceases to flow voluntarily: They wound the Bark of the Trunk to the Wood itself, with sharp Instruments, and so from Noon 'till Evening you will see the *Manna* flow from those Wounds, which is sometimes clotted together at the Bottom of the Tree, like little Sticks of Wax. This they gather the next Day after the wounding, and it is yellower than the former, and therefore not so much esteem'd, being apt to grow brown if kept any Time, yet nothing less purgative.

Thirdly, There is a *Manna* of the Leaf; this flows voluntarily from the Leaf or Leaves of the Ash, like little Drops of Water, and appears in the Nature of a Sweat upon the nervous Part of the Leaf, during the Heat of the Day, and extends itself all over the Leaf; but the Drops are bigger at the Stalk, than at the End or Point of the Leaf, and harden and become white in the Sun as the former, being something larger than Grains of Wheat. In August the great Leaves of the Ash will be so loaden with these Drops, as if they were cover'd with Snow: This is as purgative as any of the rest.

Manna is an excellent Purge for Children, and others that are of weak Constitutions, and abound with sharp salt Humours; it is temperate, inclining to Heat, mollifies or softens the Throat and Windpipe, opens Obstructions of the Breast, Lung, and other Bowels, purges watry Humours, and keeps the Belly soluble; being an excellent Thing for such as are apt to be costive. *Hoffman* says, it ought not to be given crude, but boil'd, not being less flatulent than Cassia, and therefore shou'd not be administer'd without Correctives.

There is a Spirit of *Manna*, made by Distillation in a Retort. *M. Charas's* Spirit of *Manna* is prepar'd thus: Put *Manna* into a Retort, filling it two Parts in three full, distil in Sand; first, with a gentle Fire, then increasing by Degrees; distil to Dryness, cohobate the Liquor, and repeat the Distillation, so will you have a spirituous Water, containing all the best of the *Manna*, which is not only an excellent Sudorifick, but a wonderful Specifick against all Sorts of Agues or

intermitting Fevers, giving it at the Beginning of the Fit; Dose two Drams or more in Carduus Water. *Schroder's* Spirit of *Manna* is thus made: Dissolve *Manna* in May Dew, and cohobate 'till it sublimes to the Head of the Alembick, like Snow; so the Mercury of the *Manna* being brought to the fluid Nature of a Spirit, becomes a Solutive for Minerals: But this I dare not affirm for a Truth, never having seen it tried.

3. Of Briançon Manna.

THE *Manna* of Briançon is a white dry *Manna*; but as it is of no Use, and little of it is sold, I shall therefore not dwell long upon this Subject. This *Manna* flows from the large Branches of the *Larix* or Larch-Tree, for which Reason it is call'd *Manna Loricæa*, and it is met with plentifully in the Hills of *Dauphiny*, especially about Briançon, from whence it takes its Name.

Besides the Briançon *Manna*, there are other Sorts; the scarcest and most valuable of which is the *Mastich Manna*, from the *Levant*, or that of *Syria*: This is a *Manna*, which in Colour comes near that of *Calabria*, and is in Grains like *Mastich*, whence it was so call'd; this flows from the *Cadars* of *Lebanon*.

This *Manna* is very scarce in France; though I have about three Ounces, which was affirm'd to me to be true, which is of the Colour and Figure already described, of a bitter and unpleasant Taste, which is very different from *Fuchsius's* Account, who says, the Peasants of Mount *Jebanon* eat it. This Variety of Tastes probably proceeds from its Age, or the Change of the Climate: The People of *Mexico* have a Kind of *Manna* which they eat as we do Bread; and there is a Kind of *Manna* which the *Africans* have in constant Use instead of Sugar or Honey.

There is also a *Persian* Kind in large Lumps; but as none of them ever come to us, it won'd be but unnecessary to write any Thing more about them.

4. Of Liquid Manna.

THE Liquid *Manna*, or *Teremabin*, is a white *Manna* that is glewy like white Honey; it is met with upon certain Plants, garnish'd with Leaves of a whitish green, and beset with reddish Thorns; the Flowers are also reddish, and are followed by Pods like those of the *Colutea*, or Bladder Sena: It grows plentifully in *Persia*, and about *Aleppe* and *Grand Cairo*, whether it is brought in Pots, and sold to the Inhabitants, who use it as we do *Calabrian Manna*.

This

This Liquor is very rare in *France*. In the Year 1683, a Friend of mine, who had been in *Turky*, made me a Present of about four Ounces, which I keep to this Day; and which was, when given me, according to the Description I have made of it; but as Time destroys all Things, the Colour is chang'd to a grey, and it is become a Syrup of a good Consistence, and of a reddish brown; and that which is most remarkable is, that the Taste is sweet, Sugar-like, and pleasant, and that it is not turn'd sharp.

There is met with, besides, in the *Asia major*, upon several Trees like the Oak, a Liquid *Manna*, especially near *Ormus*, whence it is brought into the Towns in Goat-Skins, where they make so considerable a Trade of it as to transport it to *Gen*: This *Manna* is of the same Figure and Colour with the former, but it will not keep so long.

Manna is a white or yellowish concrete Juice, which inclines much to the Nature of Sugar or Honey, melting or dissolving easily in Water, of a sweet Honey-taste, and a faint weak Smell; it flows either with Incision or without, in the Nature of a Gum, from the large Branches and Leaves of the Ash-Tree, both wild and cultivated.

The finest and most pure *Manna* flows without Incision in *June* and *July*, when the Sun is the hottest; it drops in crystalline or fine transparent Tears, almost like Gum Mastich, some larger and some less, according to the Nature of the Soil, and the Trees that it grows upon. In a Day's Time it hardens by the Heat, and grows white, unless it happens to rain that Day, for then it is all spoil'd; they take it from the Place when it is condensed, and dry it in the Sun again, to render it whiter and fitter for Carriage.

The second Sort of *Manna* is taken from the same Trees in *August* and *September*. When the Heat of the Sun begins to decrease, then they make Incisions into the Bark of the Ash-Trees, and there flows a Juice which condenses into *Manna*, as the first Sort; there runs a greater Quantity than the first, but it is yellower and less pure; they remove it from the Tree and dry it in the Sun. In rainy or dripping Years they make very little *Manna* from the Trees; because it liquifies and spoils by the Wet, which is the Reason that some Years the *Manna* is dearer than others.

When *Manna* is kept it loses much of its Beauty, and does not lose a little of its Virtue. Several People believe that the older it is the more purgative it grows, which I cannot at all understand; and therefore advise you not to use the red or brown decay'd and soft *Manna*, which

sometimes you meet with at the Druggists, but take the purest you can meet with. It is a gentle Purger, and proper for the Head, from an Ounce to two Ounces. The Word *Manna* comes from the Hebrew Word *Man*, which signifies a Kind of Bread, or something to eat; for it has been receiv'd among the Antients, that the *Manna* was a Dew of the Air, condensed upon certain *Calabrian* Plants, resembling that which God rained down upon the *Israelites* in the Desert for Food.

[*Manna* is the condensed Juice of the *Fraxinus retundior folio*. C. B. Pin. 416. *Fraxinus Alepensis*. Herm. Cat. Lugd. Bat. 261. It grows plentifully in *Calabria* and *Italy*.

Beside what has been already mention'd to prove that *Manna* is not a Dew, as had been believ'd for many Ages, the greatest Proof of all that is not so, is, that all Dews melt in the Sun, whereas *Manna* is very well known to dry and harden by its Heat.

The *Arabians* were the first who discover'd this Medicine; it was unknown to the ancient *Greeks* and *Romans*.]

5. Of Gamboge, or Gum Gutta.

GUM Gutta, or Gutta Gamba, Gamboge, Gamandra, or the *Peruvian* Pomet. Gum, is a Gum that flows from the Trunk of a creeping Plant, that is of a paracul Nature, it has neither Leaves, nor Flower nor Fruit; and produces nothing but a Quantity of prickly or thorny Branches, which arise one among another, according to the Figure represented in the Plate. Or else, according to an Account I have receiv'd since the first Publication of this Work, from a *Chinese Tree*, call'd by the *Indians*, *Codelumpuli*, or *Cantopuli*, which bears reddish Apples, of a nauseous sour Taste, and without Smell. The Gum is gather'd from the wounded Bark of the Tree, and the *Indians* afterwards dissolve it, and form it into Cakes, as we receive it.

The People of *Siam*, and the adjacent Countries, cut the thick Trunk of the Plant, from whence proceeds an insipidate milky Juice, of a moderate Consistence, which after it is left some Time in the Air, thickens and grows yellow, and then the People roll it up like Paste, and afterwards make it into Cakes, as we have it brought to us. The Peasants about *Odia*, or *On-dia*, the Capital of *Siam*, bring it to Market to sell.

It is most commonly brought into *Europe* from *Peru* and *China*, and other Places of the *East*; being of a pure fine Body like Aloes, but of the Colour of the finest Turmeric, being a good yellow, inclining to an Orange-Colour, without Rubbish.

Book 8

of Gums

10



in Arabick

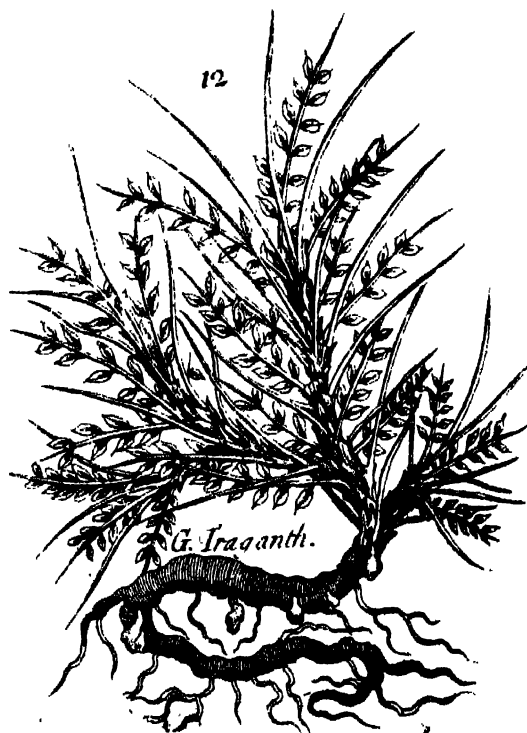


Gum Senega.



Gummi.

12



G. Tragacanth.

Rubbish or Filth in it, fine and clear in Roll or Cassia, and easily dissolving in Water, being almost all of it Nature, but is colour'd with Sulphur, plainly appears, not only by the chymical Rectification, whereby a large Quantity of Oil is extract'd from it, but also from that bloody Colour, which the Solvent acquires when Limbeck is pour'd upon it, from the very same Colour which is produced in the Water, if you boil common Sulphur or Bitumen along with it, and that Gum is not altogether destitute of a Tinge of this Colour, manifestly appears by its producing a greenish Colour upon the Blue Paper.

Gamboge ought to be chosen of a bright yellow Colour, a little inclining to red, clean and free from Sand, and which being chew'd, does the Spittle of a yellow Colour, and being held to the Flame of a Candle is apt to take Fire. It is describ'd crude or unprepar'd, from three Grains to six or ten; but it will do better in a Magistery, as follows: Take what Quantity you please of *Gamboge*, dissolve it in Spirit of Wine tartariz'd, then pouring Water upon it, a Powder of a noble yellow Colour will precipitate or fall to the Bottom: This is given from six to ten Grains by itself, or in an Ounce of Pulp of Cassia for a Bolus. Others dissolve it in Vinegar, or Spirit of Sulphur or Vitriol, and so make an Extract. *Gum Gutta* is used in the Catholick Extract of *Sennertus*, in the Cholagogue Extract of *Rosinchius*, in the Hydropick Pills of *Bontius*, in the Hydragogick Electuary of *M. Charas*. Lastly, the Pills of *Gutta Gamandra* of the *London Dispensatory*, borrow their Names from it.

This was, doubtless, the Gum *Amardus* used against the Gout: It both vomits and purges admirably, carries off watry Humours, and is chiefly used against Dropsies, Cachexia's, Gouts, Scabs and Itch. *Rosinchius* says, it suffices to give this Gum crude, being finely powdered, and sprinkled with Spirit or Oil of Aniseeds, and so dry'd again. It is an incommensurable and beneficial Cathartick for purging serious and watry Humours, and may be given in a Scruple in Substance in strong Constitutions.

There is a yellow staining Colour to wash Maps and Pictures with, made of this *Gamboge*. Put into Water enough to dissolve it, it makes a good Colour for Pen or Quill; if you add a little Gum Arabick it will be so much the better; being dissolv'd likewise in clear Spring Water, it yields a very beautiful and transparent yellow, especially with the Addition of a little Alum to it, which will both brighten and strengthen the Colour.

Gummi Gutta, Gutta Gamboge, Gutta Gamandra, &c. *Gamboge* is a resinous Gum brought from the East Indies in large Rolls or Cakes, that are hard, brittle, and extremely yellow. It flows from the section from wounds of the Carcapuli shrub, that runs up a little, and is about as thick as any neighbouring Juice of the same Tree, as it is thicker than a Man's Urine, and the manner of cutting of it, get a little, which being of the Consistence of a Paste, may be moulded into what Form you please. Some Authors say that the Tree which produces this Gum, is a Kind of *Lathyrus*, and that the Leaves are as thick as those of the greater Houseleek. It ought to be chosen dry, hard, brittle, clean, and of a deep Colour. It tinges strongly upwards and downwards, and ignorant People should not be too busy with it.

[*Pomet's* later Account of this Gum was right, for the Tree which produces it, is the *Carcapuli*. Park. Theat. 1635. *Carcapuli Acosta, fructu malo aureo simili*. Pluk. Alm. 81. *Coddam-Pulli seu Ota Pulli*. Hort. Mal. 1. 41.

There have been various wrong Opinions among Authors about the Origin of this Gum, some thinking it the Juice of a Kind of Spurge, and others of a *Scammony*; others also have thought it fictitious, and colour'd with Turmeric; but it is now certainly known to be the pure and natural Juice of that Tree.

There is indeed another Kind of *Gamboge* gather'd from an Indian Plant of the *Efula* Kind, and call'd *Lenam Cambodia*; but the only *Gamboge* now brought to us is the Juice of the Tree here mention'd.

It is remarkable that this Gum is so violent a Medicine, the Fruit of the Tree has no sensible Quality, but may be eaten as an Apple or an Orange.]

6. Of Gum-Arabick.

THE *Gum-Arabick, Theban, Babylonish*, or the *Egyptian Acacia Gum*, *Pomet*. which is the Name of the Tree which produces it, is a whitish, transparent Gum, which flows from little Trees that are very prickly, whose Leaves are so small, that it is difficult to count them; and that grow in the happy *Arabia*, from whence it is call'd the *Arabian Gum*. This is brought to France by the Way of *Marseilles*: But since the *Gum Senega* has been brought us, the true *Gum Arabick* is become so scarce at *Paris*, that one can hardly meet with any.

Chuse such as is white, clear, transparent, and the dryest and largest Drops that can be got, especially for the *Theriaca*. This Gum is used

with good Success for several Infirmities of the Lungs, and to soften the Sharpness of Coughs; Gum Senega is often substituted for it, and several People make it the Basis of what they call the Liquorice Juice of Blois. It is of the *Moors* that we buy it, who gather it in the Deserts of *Lybia*, where it runs from the Trees that produce it, as our Cherry and Plumb Tree Gums do from them.

Gummi, Arabicum, Thebaicum, Bal-Lemery. *bylonicum, Achantinum, Saracenicum*, is a Gum that is brought to us in large Tears, or white Pieces, inclining sometimes towards a yellow, clear, transparent, and glewy in the Mouth, without manifest Taste: It flows by Incision from a thorny Tree, call'd *Acacia*. This is a noble Tree growing in *Egypt*, and cultivated in several Gardens of *Europe*, having Sprigs and spreading Roots, and a Trunk rising six Fathom Height, solid, full of Branches and Boughs, arm'd with strong and stiff Thorns or Prickles; the Leaves are small and fine, growing by Couples on each Side of a Nerve or Rib, that is two Inches long: The Thorns or Prickles are of a bright green Colour, a quarter of an Inch long, and the twelfth Part of an Inch broad; out of whose Wings the Flowers come forth in round Heads, resting upon a Foot-stalk an Inch long; they are of a golden Colour, single-leav'd, of a fragrant Smell; and from a small narrow Pipe, enlarging themselves to a wide-mouth'd Cup with five Notches, adorn'd in the middle with a numerous Train of Threads, or small Chives, and a Colour inclining to a reddish, two Inches long, and bending or crooking, after the Manner of a Bow, in whose Cavity are several Partitions, distinguish'd with fungous or spongy Membranes, of a whitish Colour, containing Seeds that are of an oval Figure, flat and hard.

The greatest Part of the Gum we call *Arabick*, that is in the Druggists Shops, comes not from *Arabia*, but is only a Gum that is like it in Figure and Property, that is brought from *Senega*, or rather a Collection of several aqueous Gums, found upon several Sorts of Trees, as Plums, Cherries, &c. all which are in some Measure, pectoral, moistening; cooling, agglutinating and sweetening; proper for Rheums, Inflammations of the Eyes, Looseness, &c. The true Gum *Arabick* falls by little and little from the Trees, especially in Time of Rain; and agglutinates or sticks together in large Pieces, that are fine, clear, white and transparent; and this is call'd Gum *Turick* that is used by the Silk Dyers.

[The true Gum *Arabick* is the Product of the *Acacia vera*. Rai. Hist. 1. 976. *Acacia vera Egyptiaca Siliquis Sinuosis sive Lupini*. Breyn.

Prodr. 2. 2. *Acacia felis Scordioidis Leguminosa*. C. B. Pin. 392.

But there is indiscriminately brought over with this, the Gum of the *Acacia Indica Farnesiana*. Ald. 2. Rai. Hist. 1. 977. *Acacia Indica siliqua tumida tuberosa*. Breyn. Prod. 2. 2. The Gums of both these Species are much of the same Nature, but they differ something in Form and Colour, that from the true *Acacia* being in thicker Drops, and something yellowish, and that from the *Farnesian* slenderer, and perfectly white.

7. Of Turick Gum.

THE *Turick*, or *Turis Gum*, is no other than the true *Gum-Arabick*, fallen from the Trees in a rainy Season and mass'd together; which is brought from *Marseilles* in great Lumps, that weigh sometimes more than five hundred Weight a-piece, which happens from their close Stowage in the Ships that bring 'em over. Chuse the dry, clean, bright and transparent Gum, and the whitest you can get: This Gum is much used by the Silk Dyers.

8. Of the Vermicular Gum.

THE *Vermicular*, or Worm-like Gum, is the Gum *Arabick* or *Senega*, which falling from the Trees twist'd, remains in the Figure or Shape of a Worm, from whence it takes its Name. Chuse the white, clear, and transparent, in little Windings; the dry and true *Arabick*, especially for the Treacle, which is the principal Intention of it.

9. Of English Gum.

THE *English Gum* is a white *Arabick*, or *Senega*, dissolv'd in a little Water, and reduced into the Form of Paste, after having spread it upon a Stone oil'd, of what Thickness they please, and then leaving it to dry a little; that is to say, to the Consistence of *Flanders Glue*; after that they cut it as they please, and dry it. This Gum is made to curl Hair, and upon that Account is call'd the curling and *English Gum*, because the *English* first made it.

10. Of Gum-Senega.

THE *Senega Gum*, which we frequently call *Gum-Arabick*, and which is sold at this Time in our Shops for it, is a Gum which flows from the Trunk and large Branches of Trees, furnish'd with Thorns and very small green Leaves, and white

white Flowers, from whence arise round and yellow Fruit resembling Figs. These Trees grow plentifully in several Parts of *Africa*, in *Guinea*, &c. from whence this Gum is brought from *Senega*, by the Blacks, or the white Men, that come from the Mountains, and who carry it on their Back, or on Camels, in Panniers made of Palm-Leaves, to the French Establishment at *Senega*, from whence it is sent by the Merchants to several Ports of *France*.

[The Gum *Senica*, or *Senega*, is brought to us in large Pieces; it is a Kind of Gum *Arabick*, and drops from another Species of the same Tree. The *Acacia Siliquis Compressis*. Ind. Med. 57. It is much of the Nature of Gum *Arabick*; and commonly what we buy for Gum *Arabick*, is this Gum broken into small Pieces.]

11. Of the Country Gum.

THIS is such as the Peasants bring to *Paris*, which they gather from their Fruit-Trees, as Plums and Cherries, that come forth from the Trees in the same Manner with the former, and are so much like some of them in Colour, Form, Substance and Nature, that they are not to be known asunder; so that many People believe that they are all but one and the same thing, however they have all one and the same Quality and Operation, and are used to cure Coughs, Colds, Catarrhs, Hoarseness, Shortness of Breath, &c. Chuse it as dry and clean as may be.

[This is bought up by our Druggists, who mix it among what they call their Gum *Arabick*.]

12. Of Gum-*Tragacanth*.

Pomet. THIS Gum, which we usually call *Traganth*, or *Tragacanth*, is a white curled Gum made like little Worms, of an insipid mucilaginous Taste. The Shrub which produces it, is small and prickly, supply'd with very little Leaves of a whitish Green, which the People of *Marseilles* call *Fox-Beard*, or *Goat's-Thorn*. This Gum flows by the cutting of the Trunk, and the thick Roots of these little Shrubs; they are numerous in *Syria*, especially about *Aleppo*.

This Shrub has Roots, according to *J. Bauhinus*, that dive deeply into the Ground, spriggy, and of a brown Colour, sending forth several Twigs, running and spreading along the Surface of the Earth, in a round Figure or Circle, with coupled Leaves growing upon a Rib, ending in a sharp Thorn or Prickle. They are of a roundish Shape, of a whitish Colour, and soft. The Flowers are papilionaceous, of a whitish Colour,

inclining to a blue, and running together in round Heads; unto which succeed Cods, that are cover'd with white Hairs, and distinguish'd into two Apartments, in which are contain'd Seeds of the Shape of a Kidney. There is nothing that grows more frequently upon the Sea Coast, about *Marseilles*, and upon *Harper's Point* or *Cape*, nigh *Toulon*, than this Thorn. This Gum issues out of the wounded Roots of this Thorn, running together in Lumps of different Sizes, some bigger and some less; some very clean and clear like Iling-Glass; others again looking more blackish and foul: Both this and Gum-*Arabick* thicken the Humours, and moisten; but they are chiefly used for the Incorporation of Powders, and are dissolv'd in Rose-Water, and the like, and a Mucilage extracted thence.

Tragacanthum, or *Dragacanthum*
Gum-*Traganth*, is a white, shining, *Lemery*. light Gum, in little long Pieces, slender and curled, or winding, in the Nature of Worms: They get it by Incision from the Root and Trunk of a little Shrub, call'd by the same Name *Tragacantha*, or *Spina Hirci*, *Goat's-Thorn*: It bears several hard Branches, cover'd with Wool, and furnish'd with white Thorns, and very small thin Leaves, rang'd in Pairs, and ending in a whitish Thorn. The Flowers grow on the Tops of the Branches, join'd several together; they are leguminous, and like those of the little Broom, but white. After they are gone succeed Pods, divided each into two Partitions, full of Seeds, the Size of that of Mustard, and the Shape of a little Kidney: The Root is long, and stretches wide; it is as thick as one's Finger, white and woody.

[The Shrub which produces this is the *Tragacantha vera*. Park. 995. *Astragalus Aculeatus fruticosus*, *Masiliensis Tragacantha Dictus*. It is kept in the Gardens of the Curious, and flowers in June.

The *Poterium* is another Species of this Shrub. It is the *Tragacantha Granatensis foliis incanis deciduis flore albo*. Hist. Ox. 2. 113. *Tragacantha altera seu minor Poterion forte Dioscoridis*. Park. 996. The Root of this was once esteem'd good in Nervous Cases, but at present is never seen in the Shops, or heard of in Practice.]

13. Of Camphire.

Camphire is a resinous and very combustible Gum, of a penetrating *Pomet*. Smell, and easy to dissipate into the Air, because of the Sulphur and volatile Salt, of which it is compos'd. It flows from the Trunk and large Branches of great Trees, that have

have Leaves like those represented in the Figure vers'd, whose Original is in my Hands, given to me by Mr. Tournesfort: These Trees grow plentifully in the Isle of *Borneo*, and other Parts of *Asia*, and in *China*.

The Inhabitants of the Places where these Trees grow, cut the Trunks, from whence flows a white Gum, which is found at the Foot of the Tree in little Cakes, and which is brought into *Holland* to be refin'd. This Gum, as it comes from the Tree, and as it comes out of the Country, is call'd *Rough Camphire*; which, to have its requisite Quality, ought to be in brittle Pieces; and being broken should be like white Salt, of the Smell mention'd before, the driest and least impure that may be.

This rough or unrefin'd *Camphire* is sometimes to be met with at *Rouen* and *Paris*; from whence it is sent to *Holland* to be refin'd, because no Body else will take the Pains or Trouble to do it but the *Hollanders*. I wonder what all our Chymists have thought on, that they never yet have inserted into their Books the Manner and Way of refining *Camphire*: Yet nevertheless some believe that the *Camphire* we sell is just as it is drop'd from the Tree, which is wide of the Truth; since the rough *Camphire*, as it comes from the Tree, is in Pieces of different Sizes, and like white Salt that is very dirty; and that we sell is in Cakes made in cover'd Pots, white, clear, and transparent; which lets us understand it has been work'd, and could not come so from the Tree: And for the Satisfaction of the Publick, I will lay down the Manner of refining it, which was never told me by any Person, but as I discover'd it by Experience, by which I have learn'd that,

They refine or purify rough *Camphire* by putting it into a Matras, or other subliming Vessel, after it is pounded, and after half the Vessel is fill'd with the Powder, they stop it lightly; then they place it upon a gentle Fire, and presently the more subtil Parts of the *Camphire* rise and cling to the Top of the Vessel; and when all is sublimed, they find it fine, white, transparent, and thick, according to the Quality of the unrefined *Camphire* that was employ'd. After Sublimation they meet with a *Caput Martium* at the Bottom of the Vessel that is of no Value. There adheres to the refin'd *Camphire* a *Camphire* that is extremely white, and all in little Grains, which is likely what would not incorporate as the other. As the rough *Camphire* therefore is common enough among us, I know no Necessity we lie under, to let it all pass thro' the Hands of the *Dutch*, to make it either useful for Medicine, or other Purposes; as Fireworks, or the like. As

to its Virtues, Mr. *Lemery* says, the Oil is very valuable for the Cure of Fevers, a Piece of Scarlet Cloth which has been dip't into it, being hung about the Neck. This Oil is made by the Assistance of Spirit of *Nitre*, that makes it of an Amber Colour; and this is wonderfully recommended in Pains, and where the Bones are carious.

Other Authors are of Opinion, that the *Camphire* of the Shops, is obtain'd from a Tree that rises the Height of a Man, furnish'd with a Number of Branches and Boughs, spreading far abroad, and bearing Leaves very thick, and close by one another, not much unlike the Leaves of the common Bay-Tree, bright, smooth, and somewhat curled and waved about the Edges; of a dark green Colour, a sharp aromatick Taste, and of a strong vehement Smell: None as yet has given a perfect Description of the Flowers of this Tree; yet it is certain that a Fruit succeeds to the Flowers coming out of a longish Cup. Within this Fruit is enclosed a round Shell of a blackish Colour, inclining to a brown, not very hard, containing a fourish Kernel, cloven in two, being fat, of a biting aromatick Taste, but not unpalatable. This Tree grows plentifully in the Country of *Japan*. *Camphire* is extracted from the Roots of this Tree; they cut the Roots into small Pieces, and throwing them into a Brass Kettle, they cover it with a Lid that is broad at the Bottom, and tapering, sharp or narrow at the Top, like the Head of an *Alambick*, and putting the Kettle over the Fire, that volatile Salt, the *Camphire*, ascends and cleaves to the Cover or Lid. This *Camphire*, at first, is of a fordid whitish Colour, and very foul, but after the *Hollanders* have refin'd it by the Help of Fire and Glass Vessels, it is so order'd and elaborated, that it becomes transparent.

Some say that *Camphire* sometimes flows naturally or spontaneously from these Trees, or else by making deep Incisions into them; but the best *Camphire* is drawn from the Roots of the *Cinnamon-Tree*, as others aver: Chuse such as is white, transparent, brittle, dry, of a biting pungent Taste, and that smells like *Rosemary*, but much stronger: It is a true oleaginous volatile Salt, abounding with Sulphur, whence it easily dissolves in Water and Spirit of Wine. This Medicine provokes the Courses, and assists wonderfully in Suffocations of the Womb: Besides its Faculty of subduing Hysterick Distempers, it is also anodyne, procures Sleep, and resists Putrefaction; upon which Account it is often prescrib'd in malignant Fevers, and after the Use of Emetics, to refresh and restore the fainting and drooping Spirits. Spirit of Wine camphorated, may be taken inwardly

